Polaroid

Archive

Service Bulletins

Published 1/94 through 10/00

This Archive contains a collection of service bulletins which have been written by members of the Polaroid Technical Support Organization.

Use the Bookmarks to the left to locate and open documents by product name and subject matter.

Americas Business Center
Technical Services
201 Burlington Road
Bedford MA 01730
TEL: 1.781.386.5309
FAX: 1.781.386.5988

Polaroid Corporation

Customer Support Service
201 Burlington Road
Bedford, MA 01730-1406

FILM INFORMATION NOTICE

INITIATOR:	**H. LIMBO**	NOTICE #	**024123**
REVIEW:	**B. DONOVAN**	DATE:	**FEBRUARY 2, 1994**
SUBJECT:	**POLABLUE "MYSTERY" STREAKS; CHANGE IN REFRIGERATED STORAGE RECOMMENDATION**	PRODUCT:	**POLABLUE BN**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☐ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☐ Integral
	☒ 35mm
	☐ All

DESCRIPTION:

Since its introduction in 1987, PolaBlue has been plagued by a low level defect labeled by film manufacturing as “Mystery Streaks”. These streaks are a form of processing streaks which can start at any point during processing, have a wavy appearance , a brownish stain and transfer of material to the backside of the film strip. Film manufacturing has not been able to determine the cause of this defect but they have identified that refrigeration of the processing pack is a contributing factor.

While work continues to identify the cause of these streaks, manufacturing is recommending that customers **not refrigerate the processing pack**. Refrigeration of the film cartridge is still encouraged and the tip-sheet will be modified to reflect these changes, along with a “goldenrod” insert in the film pack.

NOTE: THIS CHANGE EFFECTS **ONLY** POLABLUE, NOT ANY OTHER INSTANT 35mm FILMS.

When the customer goes to process an exposed film cartridge, the code on the cartridge should match the code on the processing pack.

If you have any questions, please contact Brendon Donovan at PTN 225-5206 or Harro Limbo at PTN 221-4424.

Polaroid Corporation

Customer Support Service
201 Burlington Road
Bedford, MA 01730-1406

FILM INFORMATION NOTICE

INITIATOR:	**E. DACEY**	NOTICE #	**044124**
REVIEW:		DATE:	**APRIL 15, 1995**
SUBJECT:	**EXPIRATION DATING**	PRODUCT:	**T-600 HD; SPECTRA/IMAGE; 95FILM PRODUCTS**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☐ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☒ Integral
	☐ 35mm
	☐ All

All Hybrid IV film products, which currently include:

T-600 HD(US)
T-600 Plus(EUR)
Spectra(US)
T-990
Image(EUR)
Vision95(EUR)
JoyCam95(NPKK)
Captiva95(US)
as well as T-331 (B & W Autofilm)

are now designated as having a 15 month shelf life. That is, the expiration date indicated on the film package is 15 months beyond the date of manufacture as opposed to the current 12 month expiration dating.

All testing indicates that Hybrid IV and T-331(B&W) Autofilm chemistry is stable and produces acceptable photos throughout the extended life of the film. Data reviewed to verify this fact includes shelf life, sensitometry and functional testing, plus customer surveys and marketing information.

This change has been initiated with film manufactured in February, 1994. As an example, film manufactured in February 1994 has an expiration date of May 1995.

Polaroid Corporation

Consumer Services
784 Memorial Drive
Cambridge, MA 02139-4639

FILM INFORMATION NOTICE

INITIATOR:	E. Dacey	NOTICE #:	054125
REVIEW:	S. King / B. Vaan Holt	DATE:	May 31, 1994
SUBJECT:	Yellow/Blue Fogging	PRODUCT:	T600 Plus, T600 HD, Spectra HD, Image HD, T779, T339

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☐ Internal Polaroid	☐ Pack
☐ U.S. Service Centers	☐ 4 X 5
☐ International Film Mfg.	☐ Large Format
☐ International Subsidiaries	☐ Integral
	☐ 35mm
	☐ All

PROBLEM:

Since the first quarter of 1992, the Waltham and Enschede Film Manufacturing facilities have produced film lots with a random fogging defect. The film lots include:

T600 Plus
T600 HD
Spectra HD
Image HD
T779
T339

The defect is exhibited in the Hybrid IV products (T600 and Spectra/Image film), as fogging that ranges from flat colors with a faint yellow cast throughout the entire photo to a bright yellow fog with a faint image in the photo. The defect as seen in Star chemistry film (T779 and T339 lines) is the same except that the fogging is blue.

Intensive studies have been undertaken to determine the cause of the problem, but no conclusions have been reached to date.

ACTION:

If you receive any customer complaints that fall within the parameters of the problem description above, gather any finished photos, the remaining film pack, and any packaging components (box, pouch, etc;) and send them to the nearest Film/Customer Liaison office. The Liaison office should then forward the material to:

Polaroid Corporation
Attn: Shari King
R-2, Reservoir Facility
868 Winter Street
Waltham, MA 02154-1274

QUESTIONS:

If you have any questions concerning this notice, please call either Ed Dacey in Cambridge (577-2959), Shari King in Waltham (386-0184), or Benno Vaan Holt in Enschede (244-1421)

Polaroid Corporation

Consumer Services
784 Memorial Drive
Cambridge, MA 02139-4639

FILM INFORMATION NOTICE

INITIATOR:	ED DACEY/SHARI KING	NOTICE #:	FIN 094126
REVIEW:	PAUL FLEMING	DATE:	SEPTEMBER 9, 1994
SUBJECT:	REVERSED SHEET ON T-331	PRODUCT:	T-331

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☐ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☒ Integral
	☐ 35mm
	☐ All

DESCRIPTION

Film Manufacturing has identified several T-331 film lots that were assembled with a reversed sheet. When the sheet is reversed, the fixing chemical layer is on the wrong side and causes the film image to remain soft and susceptible to damage. Also, the reversed sheet will develop crystals on the back (black) side of the frame several hours after processing. The affected lots are numbered **08-14-060** through **08-14-063.**

This problem has been identified and corrected in manufacturing. However, some product was released to the field before the problem was discovered.

POLICY:

If a customer is known to have T-331 film from lots **08-14-060** through **08-14-063** or, if you receive any complaints which could be related to this problem, please replace the film.

Polaroid Corporation

Consumer Services
784 Memorial Drive
Cambridge, MA 02139-4639

FILM INFORMATION NOTICE

INITIATOR:	**Harro E. Limbo**	NOTICE #:	**104127**
REVIEW:		DATE:	**10/3/94**
SUBJECT:	**Discontinuation of T-2000 Film**	PRODUCT:	**T-2000 Film**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☒ Pack
☐ U.S. Service Centers	☐ 4 X 5
☐ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☐ Integral
	☐ 35mm
	☐ All

T-2000 Film, PID #613917, which is T-669 type film balanced for use with Polaroid Electronic ID Systems (ID2000, ID3000, ID4000), is no longer being manufactured. It has been replaced by EID-UV Film, PID #618560, which incorporates an ultraviolet sensitive coating as an additional safety feature. EID-UV is actually PC ID-UV Film which is balanced for the Polaroid Electronic ID Systems.

The following positive sheet line code suffixes identify the films referred to in this notice:

Product	***Suffix***
T-2000 Film	F
EID-UV Film	48
PC ID-UV Film	46

If you have any questions concerning this notice, please call Sallyann Hawko at PTN 226-1295 or Harro Limbo at PTN 221-4424.

Polaroid Corporation

Consumer Services
784 Memorial Drive
Cambridge, MA 02139-4639

FILM INFORMATION NOTICE

INITIATOR: H. LIMBO	NOTICE #: 104128
REVIEW:	DATE: 10/20/94
SUBJECT: Introduction of T-51HC, Positive/Negative Black & White Sheet Film	PRODUCT: T-51HC

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☒ 4 X 5
☐ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☐ Integral
	☐ 35mm
	☐ All

BACKGROUND:

We have been notifying customers who use T-51 film that Polaroid would no longer manufacture this product after August, 1994. This action was necessary because the vendor who provided negative for T-51 film indicated that they could no longer supply us.

Because of the unique characteristics of T-51, customers could not switch to other Polaroid film products and get the same results.

To meet our customer's needs, we have developed a new film, T-51HC, as a replacement for T-51. On the reverse side of this page is a summary of selected parameters, comparing the characteristics of T-51HC to T-51. Additionally, a Technical Data Sheet for T-51HC and a copy of the T51HC Tip Sheet are attached.

If you have questions concerning this notice, please contact Harro Limbo via E-Mail (cc:mail), via telephone at PTN 221-4424, or via FAX at 221-4892.

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COMPARISON OF T-51HC AND T-51:

Parameter	*T-51HC*	*T-51*
Spectral Sensitivity	Panchromatic	Orthochromatic
Positive Speed	ISO 320/26° (5500°K) ISO 200/24° (3200°K)	ISO 320/26° (5500°K) ISO 120/22° (3200°K)
Positive Contrast	High > 3.5	High > 2.5
Usable Negative (clear in 18% sodium sulfite sol.)	ISO 50/18° (5500°K) ISO 32/16° (3200°K)	Not available
Negative Contrast	Medium 0.85	Not available
Processing Time @ 71°F	30 seconds	15 - 20 seconds
Expiration Dating	12 months	15 months

REFER TO FILM TECHNICAL DATA SHEETS FOR DETAILED INFORMATION

Polaroid Corporation

Consumer Services
201 Burlington Road
Bedford, MA 01730-1406

FILM INFORMATION NOTICE

INITIATOR:	**SHARON KING**	NOTICE #:	**015129**
REVIEW:	**B. SCHRANDT**	DATE:	**JANUARY 11, 1995**
SUBJECT:	**INCOMPLETE COVERAGE AT TRAP END**	PRODUCT:	**T-339**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☒ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☒ Integral
	☐ 35mm
	☐ All

Some random lots of T-339 film manufactured in 1994 have a potential of exhibiting incomplete coverage at the center of the trap end. This potential problem depends upon the age of the film when it is used and the equipment which is used for processing.

If a customer reports film with this problem, please replace it and return samples of the defective film to either Shari King (R2-3) or Ed Dacey (BED 1-1A).

If you have any questions, call: Shari King at 617.386.0184 (PTN 226-0184) or,
Ed Dacey at 617.386.5490 (PTN 226-5490)

Polaroid Corporation

Consumer Services
201 Burlington Road
Bedford, MA 01730-1406

FILM INFORMATION NOTICE

INITIATOR:	**SHARON KING**	NOTICE #:	**015130**
REVIEW:	**M. RENY**	DATE:	**JANUARY 11, 1995**
SUBJECT:	**COPY SERVICE MESSAGE ON SPECTRA FILM**	PRODUCT:	**SPECTRA**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☐ International Film Mfg.	☐ Large Format
☐ International Subsidiaries	☒ Integral
	☐ 35mm
	☐ All

Starting in September 1994, a message has been added to each Spectra film frame. The message is located on the back of the frame, below the film code.

Shown below is a sample of the film code with the new message:

09417101567 - 2W 0900 1000
COPIES & ENLARGEMENTS CALL 800-421-1030

If you have any questions, call: Shari King at 617.386.0184 (PTN 226-0184) or,
Ed Dacey at 617.386.5490 (PTN 226-5490)

Polaroid Corporation

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Bedford, MA 01730-1406

FILM INFORMATION NOTICE

INITIATOR:	**SHARON KING**	NOTICE #:	**015131**
REVIEW:	**B. SCHRANDT**	DATE:	**JANUARY 11, 1995**
SUBJECT:	**YELLOW STAINING ON THE MASK**	PRODUCT:	**T-600 / SPECTRA**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☒ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☒ Integral
	☐ 35mm
	☐ All

PROBLEM:

Discoloration of the mask (a yellowish stain) may appear in T-600 and Spectra film if the frames are stacked in a pile soon after processing and are then stored this way for a period of time. The staining is caused by the reagent diffusing through the paper pod tape on the backside of the frame.

SOLUTION:

Film manufacturing is currently developing a pod tape with barrier characteristics which prevent the reagent from diffusing through the tape. It is expected that this pod redesign will be incorporated in film starting in the second quarter of 1995.

If you have any questions, call: Shari King at 617.386.0184 (PTN 226-0184) or,
Ed Dacey at 617.386.5490 (PTN 226-5490)

Polaroid Corporation

Customer Support Service
201 Burlington Road
Bedford, MA 01730-1406

FILM INFORMATION NOTICE

INITIATOR:	**E. DACEY / R. DEFERRARI**	NOTICE #	**035132**
REVIEW:		DATE:	**MARCH 30, 1995**
SUBJECT:	**NEW VENDOR FOR 35MM FILM**	PRODUCT:	**35mm ONE FILM**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☒ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☐ Integral
	☒ 35mm
	☐ All

Introduction & Marketing Stategy

Beginning in the second quarter of 1995, Polaroid will begin to sell 35mm OneFilm manufactured by Agfa in Germany. This new Onefilm will be designated as OF1 and is suitable for most consumer snapshots and family picture users.

Onefilm OF1 incorporates a combination of technologies, including:

a) new interlayers to prevent dye migration

b) stabilizers to assure fresh film results even with prolonged shelf or camera storage

c) better bleachability for good results when processing the negative

d) computerized manufacturing technology for consistently high quality

As a result, OneFilm OF1 has greater exposure latitude than the previous OneFilm and is less grainy.

-over-

Packaging

The package graphics will be similar to our current OneFilm product with two exceptions; "ISO 200" speed will be printed on the sides of the box, and “Made in Germany” on the back panel. OF1 will be sold in 110 and 35 mm formats, in rolls of 24 or 36 exposures.

Technical Information

Granularity:	Fine grain / diffuse RMS granularity = 5.0
Exposure:	Color balanced at 5500 K at ISO 200
Exposure Latitude:	+3 to -2 stops
Reciprocity:	no correction from 1/10,000 to 1/2 second +1 stop for 1 second +2 stops for 10 seconds +3 stops for 100 seconds
Performance Curves:	Refer to Technical Specialists

Film Identification

Packaging:	(see paragraph above)
Cassette:	Black plastic container (versus gray of previous) White metal container with OF xx Exps ISO 200 (versus blue of previous)
Negative:	Developed negative will have legend Polaroid OF1 200

Developing

OF1 uses C-41 or equivalent processing chemistry. The DX channel for OF1 is 49-5 or, its close cousin, 17-6. Printer control strips can be ordered from normal suppliers or from Polaroid Material Services Department in Bedford, MA.

Polaroid Corporation

Customer Support Services
201 Burlington Road
Bedford, MA 01730-1406

FILM INFORMATION NOTICE

INITIATOR: **Edward J. Dacey**	NOTICE #: **105133**
REVIEW:	DATE: **November 20, 1995**
SUBJECT: Integral Film Low Smear Reagent	PRODUCT: **T-600HD/ Spectra,Image/ T990/ Grid Film/ Captiva, Vision, JoyCam**

☐ SENSITIVE MATERIAL - LIMITED DISTRIBUTION

☒ Internal Polaroid	☐ Pack
☒ U.S. Service Centers	☐ 4 X 5
☒ International Film Mfg.	☐ Large Format
☒ International Subsidiaries	☒ Integral
	☐ 35mm
	☐ All

Ref Lotus Notes: 950919130350EJ

Starting in August, 1995, all **hybrid IV products (T-600 HD; Spectra/Image/T-990/Grid Film: Captiva/ JoyCam/Vision)** have been manufactured with a **low smear reagent.** This reagent significantly reduces the appearance of pod smear (streaks) in light color backgrounds or scenes.

There is no change to the frame code, but all of the above products with **085** as the first three characters of the code are the new low smear product. The pack expiration date has been changed from Aug*96 to Aug/96 - the slash representing the inclusion of low smear reagent.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. SPEC 94-14
DATE: JANUARY 14, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: E. DACEY

SUBJECT: RE-LAUNCH OF SPECTRA/IMAGE CAMERAS

INTRODUCTION:

Polaroid Marketing is re-launching the Spectra and Image family of cameras. These cameras include:

Image-A/Image-2
Spectra-A/Spectra-2

All four models are sold in International Markets while the America's Market is limited to the Spectra-A and Spectra-2 models

INTERNATIONAL MARKET: (see Figure 1)

All four Image and Spectra camera models for International Markets are black with:

gold color mid-cover graphics,
gold hot-stamped erect and door latch buttons,
new front decorative plates which have gold and red printing on a glossy black background.

Image-2 and Spectra-2 models use the same cover assembly as the Image-A with a black button bezel and black insert on a black top cover.

Small quantities of Image-2 and Image-A models are currently selling in Denmark with a target of 4th quarter, 1993 for the rest of Europe.

AMERICAS MARKET:

The Spectra-A will have new front and rear decorative plate graphics with the logo removed from the mid-cover and the hot stamp removed from the erect button. Graphics may be later added to the gear cover to indicate the film door latch.

The Spectra-2 model will be painted the same grey as current OneStep and ProCam models and will have new front and rear decorative plate graphics. The gripper will be a grey molded plastic and the erect button will be black.

Spectra-A and Spectra-2 camera models will be re-launched in the Americas during the 1st quarter of 1994.

REPAIR POLICY:

Any re-launched Spectra or Image camera returned for repair must have unique piece parts (covers, panels, or buttons, etc.) replaced with similar parts. Do not use parts from earlier models in place of damaged re-launch camera parts.

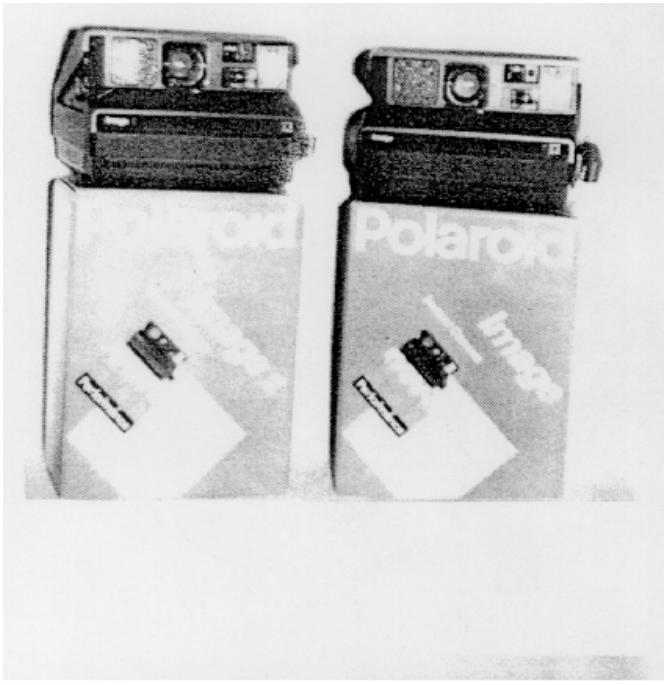
PARTS AVAILABILITY:

The unique piece parts for re-launched Spectra and Image cameras will be available from the Material Sevices in Cambridge, Massachusetts in the first quarter of 1994. Please order from normal sources.

Material Services will not make a final buy on existing decals, buttons, covers, etc. As older parts run out, they will be replaced with the current updated parts.

The Materials Matrices on the following page show all the unique parts for the new models.

FRONT



BACK

FIGURE 1 NEW IMAGE / IMAGE2 MODELS
(SPECTRA MODELS NOT AVAILABLE FOR PHOTO)

POLAROID CORPORATION
Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

EXP

SUB

SPECIAL

P.A. NO. Spec. #94-15

DATE: February 3, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: ED DACEY

SUBJECT: NEW GOLD FLASH SHIELDS

BACKGROUND

During the first quarter of 1994, all manufacturing facilities will phase-in the use of a new gold-colored flash shield in place of the current peach-colored shield. This change will be made in all 600 line/Sun hard body cameras, Impulse Fixed Focus and Auto Focus cameras, and Spectra/Image cameras being manufactured. Studies of the value of replacing the shield on folding 680 cameras are still underway.

Over the past several years, various improvements in photographic emulsions (i.e. Star to Hybrid to Hybrid IV) have resulted in a color offset between indoor and outdoor pictures that is now considered to be unacceptable. The use of the new gold-colored flash shield will yield color performance improvements of 40% (measuring color performance of flash pictures versus ambient pictures). It is expected that this change will be perceived by our customers as an improvement which will lead to increased film sales.

REPAIR POLICY

It is recommended that repair facilities replace the peach flash shield with the gold flash shield on any of the above-listed cameras received for any repair. Follow the instructions in the applicable Service Manuals for guidance in replacing the shields.

Inventories of flash assemblies with the peach flash shield should be reworked to the gold shield. discard all peach flash shields.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

PARTS AVAILABLITY

Gold-colored flash shields will be available after February 20, 1994. Order them under the following part numbers:

CAMERA	GOLD FLASH SHIELD P/N
600 Line/Sun Hard Body	550167E
Impulse Fixed Focus, Impulse Auto Focus and Spectra/ Image	791611C

Please order from normal sources.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

NPI NO. SPEC #94-16
DATE: JUNE 15, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____
QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: ED DACEY

SUBJECT: INTRODUCTION OF "LIGHT LOCK" CLOSEUP UNIT

DESCRIPTION

Polaroid will soon market a closeup lens unit, called “Light Lock”. (see Figure 1) "Light Lock" is designed to snap onto the front of all Image and Spectra cameras (except for ProCam) when a closeup exposure is desired. It emits two light beams, which when crossed, indicate that the proper focus distance of 10 inches (25.4 cm) has been achieved. Simply placing the subject at the light beam crossing point assures proper exposures for closeup images. Once "Light Lock" is activated, the aiming lights will stay on for 15 seconds before shutting off. The unit uses two AA replaceable alkaline batteries that will be included. To take exposures at normal distances, "Light Lock" can easily be removed from the camera.

An illustrated instruction decal is adhered to the top of the unit. The decal shows how to install "Light Lock" on the camera, how to turn the unit on, how to achieve proper focusing distance, and how to remove the unit.

For those scenes which may cause the aiming light beams to be invisible or very difficult to see, "Light Lock" will also be equipped with a draw string measuring tape.

"Light Lock" is manufactured for Polaroid by an external vendor. A manufacturing date code is located inside the battery compartment. Units with simple instructions will be packaged in a B Flute box identified with the product name on the outside.

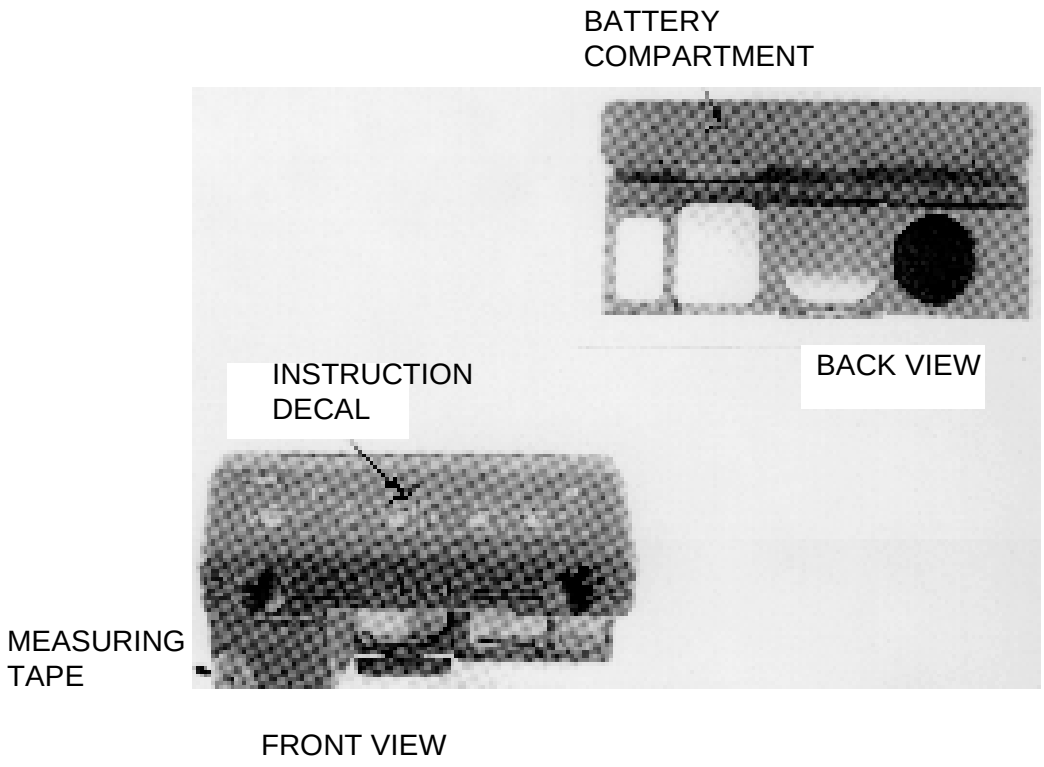


FIGURE 1 "LIGHT LOCK CLOSEUP UNIT

MARKETING STRATEGY

"Light Lock", targeted for April, 1994 distribution, will initially be sold as part of Law Enforcement II and Heath II kits in the U.S. markets. Additionally, it will be sold in the U.S. as a separate accessory. The list price for the "Light Lock" accessory is $49.95. The PID number for a “Light Lock” unit is #**618929.**

Business Marketing is now considering a trade-in program for owners of the manual unit. The trade-in program will be handled by an outside house and at a price to be determined by Marketing.

International Marketing groups are reviewing the "Light Lock" concept to determine if their markets would like to carry the unit.

Current manufacturing plans are to fabricate 10,000 units per year for all markets.

REPAIR/ SERVICE STRATEGY

"Light Lock" is warranted for 1 year except for the replaceable batteries. Units under warranty that are determined to be defective (excluding battery failures) will be replaced with a new unit. Customers will be asked to return all defective units for the purpose of failure analysis by the design team. Replacement units can be ordered from:

Polaroid Customer Service Support
Material Services Department
748 Memorial Drive
Cambridge, MA 02139.

1) Early Returns

The first 25 defective units that are returned should be replaced and the defective unit forwarded (with a completed Incident Awareness Form - sample attached) to:

Polaroid Corporation
Attn: Bob McCune/Joe Dow
Nor 4-1 - Norwood Manufacturing Center
Upland Road
Norwood, MA 02062

Fax a copy of the completed Incident Awareness Form to Ed Dacey in Cambridge at (617) 577-4892.

Incident Awareness Forms are available from Ed Dacey or Russ Battle at 784 Memorial Drive, Cambridge, MA 02139 phone (617) 577- 2959 or 577- 2921.

2) Normal Returns

Beyond the warranty period replacements for defective units can be purchased from CSS Material Services Department for $39.95. All defective units **must** be sent to Polaroid Customer Support Services - Material Services Dept., 784 Memorial Drive, Cambridge, MA 02139.

TRAINING

A “Light Lock” unit will be sent to each Polaroid Customer Service location in the Americas, Europe, and the Far East. Customer service personnel should use the unit by following the instruction book and by observing the picture decal on top of the unit. "Light Lock" is used in a manner similar to the current manual draw string closeup lens attachment unit, so there should be no need for any additional formal training.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. SPEC #94-17

DATE: NOVEMBER 21, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **EDWARD J. DACEY**

SUBJECT: **RESTYLING OF SPECTRA AND IMAGE CAMERAS**

BACKGROUND

To rejuvenate Spectra/Image Camera sales and increase Spectra/Image film sales, a restyled family of Spectra/Image Cameras will be introduced (see Fig. 1).

All new external parts give the restyled cameras a rounded, fresh look. A unified handle/viewfinder affords a sleek, wraparound appearance. Rounded, slightly raised S1 buttons are color-coded by model: red for SE, blue for A, yellow for 2.

The restyled cameras will have the same optics and one-board electronics as present Spectra/Image cameras; there are no internal changes.

The restyled cameras will be introduced in the U.S. in Oct. 1994; in N.P.P.K. in November 1994; in Europe in May 1995; and the rest of the world in June 1995.

Currently, the restyling program includes the Spectra A, Spectra SE/ Image Elite and Spectra 2/Image 2.

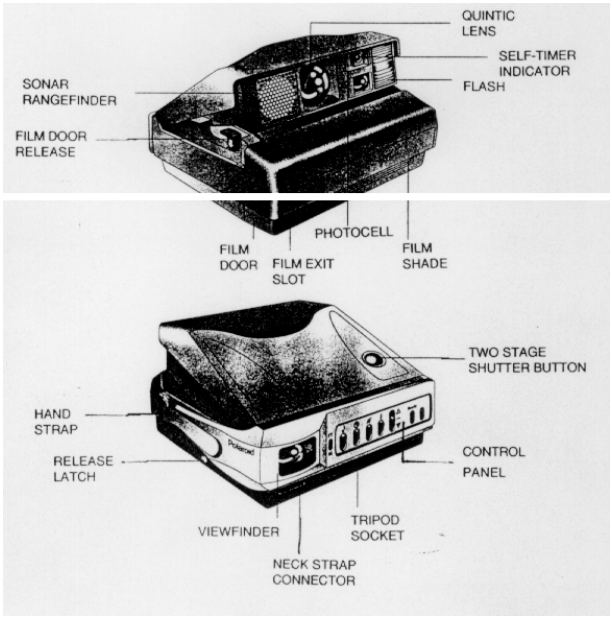


Fig. 1 Restyled Spectra/Image Camera

LAUNCH PROMOTION

Introduction of the restyled cameras will be supported by regional promotions and publicity, as well as dealer co-op and POS materials.

WARRANTY (U.S. MARKET)

For the U.S. market, each camera line will carry the following warranty:

SE/Elite - Lifetime
A - Five years
2 - One year

For markets other than the U.S., please consult the marketing managers or the Restyled Camera Operations Manual.

CUSTOMER SERVICE

Spectra cameras with a 12-digit code with serial number beginning with **K4** (October 1994) and ending with either **F** (for Spectra SE/Image Elite), **E** (for Spectra/Image A), or **D** (for Spectra/Image 2) are restyled cameras. (Example: K4BxxxxxVHBE)

In addition to the various Warranty periods listed above, the camera lines will also feature:

SE/Elite Glass coated lens, perfect picture guarantee program(U.S.)
Image Elite
(NPPK only)

A and **2** Standard Warranty

No early returns program will be needed, but customer data will be reviewed to identify any issue related to the restyled components.

PID NUMBERS

	Spectra (US)	Image (NPKK)	Image
SE/Elite	610002R	691364	TBD
A	610000S	TBD	TBD
2	615203R	TBD	TBD

CAMERA REPAIR

CI&L Parts will order a two-year supply of current-design externals. A separate Product Alert will be issued defining interchangeability of new and old parts, and part numbers of the new external parts.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. SPEC # 95-18
DATE: MARCH 21, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

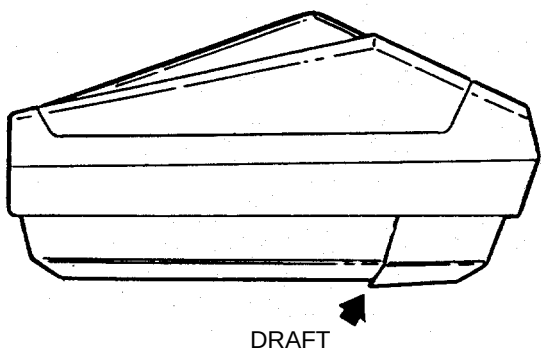
TO: LIST

FROM: ED DACEY

SUBJECT: **MISMATCH OF SPECTRA/IMAGE FRONT DOOR AND BOTTOM COVER**

BACKGROUND:

To replenish repair inventories, a quantity of front doors for older style Spectra/Image models was made by Camera Manufacturing. However, these doors have a new draft angle on the trailing edge (the part that pivots against the bottom cover when the door is opened). This new angle was initiated as part of the restyling program for the Spectra/Image family and was carried forward when the old style doors were made. When a front door with the new draft angle is installed on a camera with an old bottom cover, an unacceptable mismatch occurs. (see illustration) To resolve this problem follow the procedure below.



MISMATCH
EXAGGERATED
FOR CLARITY

PROCEDURE:

1. If you must replace an old style door with door #776086K (which has the new draft angle), you must also replace the bottom cover with bottom cover #776083F.

2. Salvage all reuseable old style doors and bottom covers. Use the salvaged parts if you must replace an old style door or old style bottom cover.

3. If a door defect centers around the roller system, try to replace only the roller system, rather than the entire front door assembly.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Camera Products Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

REPAIR INFORMATION

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. SPEC # 95-19
DATE: AUGUST 14, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____
QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **ED DACEY**

SUBJECT: **SPECTRA/IMAGE DOOR LATCH BUTTONS MADE FROM MOLDS A, B, C, & D**

BACKGROUND:

From September of 1993 to May of 1995 all Spectra/Image cameras made at the Vale of Leven were assembled with door latch buttons made from molds marked A, B, C, or D. The piece parts made from these molds are not correct and have a tendency to either make the door difficult to close or make the button too easy to remove from the camera.

Molds marked #5 through #8 are made to original specifications and piece parts from these molds do not cause either of the noted problems. See the illustration below for a comparison of the piece parts.

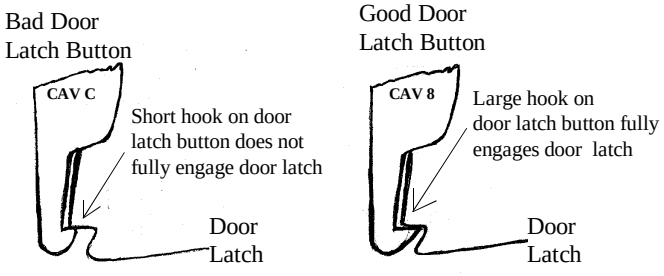
PARTS INVENTORY:

Examine your parts inventory to determine if the door latch buttons you have on-hand are from molds A, B, C, or D. If they are, discard them and reorder door latch buttons #770689G from Material Services in Bedford, Massachusetts. They will provide known good door latch buttons. (Please order from normal sources.)

REPAIR:

If you receive a Spectra/Image camera which was manufactured in the Vale of Leven between September 1993 and May 1995 and which has been returned because it will not close or because the button has come off, remove the door latch button and check the mold identification. If the button is marked A, B, C, or D, replace it with one marked mold 5, 6, 7, or 8.

Door latch buttons with mold marks A, B, C, or D on cameras made June 1995 or later, are OK.



THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. 600AM #94-43

DATE: **February 7, 1994**

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: ED DACEY

SUBJECT: NEW GOLD FLASH SHIELDS

BACKGROUND

During the first quarter of 1994, all manufacturing facilities will phase-in the use of a new gold-colored flash shield in place of the current peach-colored shield. This change will be made in all 600 line/Sun hard body cameras, Impulse Fixed Focus and Auto Focus cameras, and Spectra/Image cameras being manufactured. Studies of the value of replacing the shield on folding 680 cameras are still underway.

Over the past several years, various improvements in photographic emulsions (i.e. Star to Hybrid to Hybrid IV) have resulted in a color offset between indoor and outdoor pictures that is now considered to be unacceptable. The use of the new gold-colored flash shield will yield color performance improvements of 40% (measuring color performance of flash pictures versus ambient pictures). It is expected that this change will be perceived by our customers as an improvement which will lead to increased film sales.

REPAIR POLICY

It is recommended that repair facilities replace the peach flash shield with the gold flash shield on any of the above-listed cameras received for any repair. Follow the instructions in the applicable Service Manuals for guidance in replacing the shields.

Inventories of flash assemblies with the peach flash shield should be reworked to the gold shield. discard all peach flash shields.

-over-

PARTS AVAILABLITY

Gold-colored flash shields will be available after February 20, 1994. Order them under the following part numbers:

CAMERA	GOLD FLASH SHIELD P/N
600 Line/Sun Hard Body	550167E
Impulse Fixed Focus, Impulse Auto Focus and Spectra/ Image	791611C

Please order from normal sources.

POLAROID CORPORATION

Customer Services Support
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. 600AM #95-44
DATE: March 27, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: FRANK BLESZINSKI

SUBJECT: INTRODUCTION OF 636 AF (AUTOFOCUS) CAMERA

Introduction:

A new camera model, the 636 AF will be introduced in 1995 in the following markets :

Europe.....April 1995
Asia / Pacific....July 1995
U.S.....July 1995

Worldwide product volume is expected to be about 500 K cameras per year.

Product:

The 636 AF camera, an extension of the 636 camera line, is an autofocus integral camera intended for general photography. The 636 AF camera uses a slightly modified version of the Impulse shutter and a repackaged version of the Joshua electronics. It features Wink autofocus from 2 feet to infinity, a rapid recharge strobe with a 10 ft. range and the shutter has a maximum aperture of f/12. The 636 AF uses Type 600 film.

Unique Parts:

Except for the parts listed below, the 636 AF camera uses a combination of parts from the 636 camera, the Impulse shutter, and Joshua electronics.

- Electronic Flash Lower Housing Assembly..... 1A2965A
- Graphic Gripper U.S..... 1B2984C
- Graphic Gripper International..... 1B2984D
- Trim Button Retainer 550277C
- Trim Button 1A2942A
- Apron 1A2959A
- Front Plate 1A2957A
- Front Plate Panel Decal 1A2958A
- Configuration Label 778006J
- Apron Plug 1A2975A
- S-1 Button 1A2968A
- Cone 755991E
- Lens / Shutter Assembly 1A2950A
- Exposure Flex Assembly 1D5665A
- Baseblock 1A2943A
- Blade Assembly (set of 3) 1A2946A
- Lens Mounting Plate 1A2945A
- Ambient Photometer Lens 1A2953A
- Photometer IR Lens 1A2954A
- IR Pinwheel 1A2971A
- Ambient Pinwheel 1A2970A
- Logic Board Assembly 1D5668A
- LMP Encoder Cap 1A2956A
- LMP Encoder Assembly 1D5681A
- Shutter Latch 1A2981A

These unique parts will be available from Materials Services, Bedford Massachusetts after April 1995. Each market should assess their needs and order parts from normal sources.

Repair Procedures:

Any 636 AF cameras returned for repair must have unique parts replaced with the unique parts listed above. Any repairs should duplicate the ruggedizing features provided at original manufacture - soldered connections, tape reinforcement, etc..

Warranty:

The 636 AF camera will have a one year warranty from date of sale.

Early Returns:

An Early Returns program will be in effect (only for reasons of functional performance) as follows:

the first 150 cameras returned from Enschede
the first 100 cameras returned from the United States

When a defective camera is received, it should be recorded on an Incident Awareness Form and copies of the IAF should be faxed to:

1 - Polaroid Corp. - Customer Support Services
Attn: Frank Bleszinski
201 Burlington Road / BED 1A-1
Bedford Massachusetts 02130-1406
FAX 617 386 5611

2 - Polaroid (U.K.) Ltd.
Ken McElroy
Vale of Leven Industrial Estates
Dumbarton G82 3PW
Vale of Leven Industrial Estates
Scotland
FAX 011 44 389 5 5101

The camera and the IAF should then be shipped to Ken McElroy in the Vale as expeditiously as possible for in-depth analysis. Any film samples which are available should also be forwarded with the camera.

Test Equipment:

The 636 AF camera will be tested on the B-600 or Star Testers for ambient and flash exposures, provided that the IR level measures less than 390 @ 100cfs. This measurement should be made using a Polaroid "IR/VIS Ratio Calibrator", Part # 12630, available from Material Services in Bedford, Massachusetts.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. 600AM #95-45
DATE: JULY 9, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: KEVIN O'NEILL

SUBJECT: PHOTOMETER LIGHT LEAK IN MODEL 635/636 CAMERAS

BACKGROUND:

Camera use testing of the Model 635 and 636 cameras has revealed an intermittent light leak problem which results in black pictures. Engineering analysis found that the problem is caused by ambient light "piping" to the photometer from behind an erected strobe. When this happens, the photometer signals premature blade closure and a black or very dark picture results.

SOLUTION:

To prevent this condition from occurring, a design change has been incorporated into Model 635/636 cameras manufactured since the second quarter of 1995 .

All Model 635/636 cameras returned for repair should be checked to determine date of manufacture. If they were made before the second quarter of 1995, a piece of black foam tape should be adhered to the right side of the molded mirror light seal. (See Figure 1)

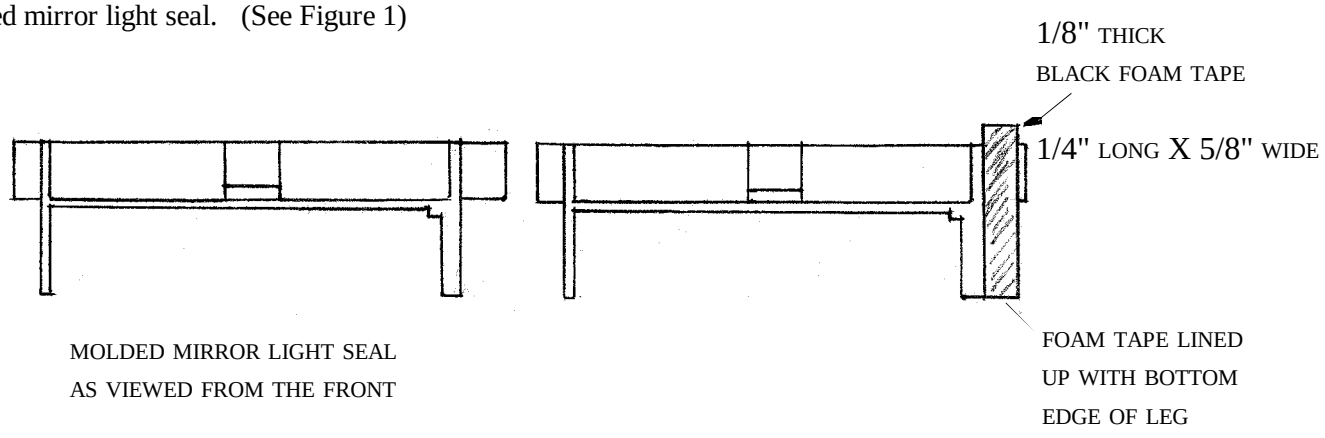


FIGURE 1 TAPING THE MOLDED MIRROR LIGHT SEAL TO PREVENT LIGHT LEAKS

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. PROCAM #94-3

DATE: FEBRUARY 11, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: PROCAM REPAIR PERSONNEL

FROM: FRANK BLESZINSKI

SUBJECT: PROCAM BLACK BAR
INSTALLING NEW BELLOWS/CONE ASSEMBLY & CHECKING ERECT SWITCH ACTUATOR CLEARANCE PLUS VISIBILITY OF DATE IMPRINT

BACKGROUND

Some ProCam Cameras manufactured before September 1993 may not fully erect or may produce a picture with a "Black Bar" across the bottom. These problems may be further aggravated when a camera, loaded with film, is stored in a cool environment.

To address this problem, Camera Manufacturing has been using an improved Bellows/Cone Assembly P/N 1A5790A (CPS) since September 1993. The new assembly has the following features:

- added booster spring
- added second erect spring
- improved bellows
- improved cone pivot points

ProCam Cameras not erecting properly or producing "Black Bar" pictures should be sent to the appropriate Polaroid repair facility for installation of the improved Bellows/Cone Assembly.

REPAIR POLICY

All ProCam Cameras received for repair with the failure mode described above should have the improved Bellows/Cone Assembly installed.

Additionally, check for the proper clearance dimension of the door/erect switch and for the full visibility of the date imprint on the picture.

-over-

INSPECTION/REPAIR PROCEDURE

1. Determine if the date imprint is fully visible by taking a picture. If the imprint is not fully visible on the picture, replace the Date Module Assembly 1B6725A before reassembling the camera as instructed below.

2. Examine the clearance dimension of the Door Latch/Erect Switch as follows:

   a. Erect the camera, open the film door, and insert an empty film pack.

   b. As shown in Figure 1, position a Door/Erect Switch Actuator Gage or a piece of 0.120" (3mm) shim stock measuring about 1" x 2" (25mm X 50mm) on the lower edge of the mid-cover and close the door. ***The camera should dark slide.*** (The gage or shim stock indicates that the Door Latch/Erect Switch has a minimum 0.050" (1.3mm) safety margin until the door bottoms out.)

   c. If the camera does not dark slide, replace the Door Latch/Erect Assembly 1B6649A.

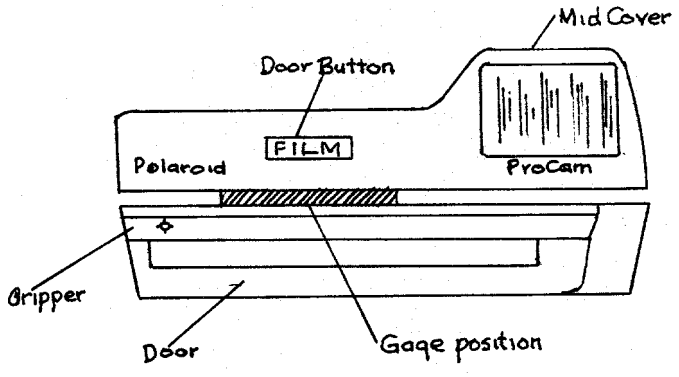


Figure 1 Checking Erect Switch Clearance Using Actuator Gage or 0.0120" Shim Stock

3. Replace the old Bellows/Cone Assembly with the new improved design Bellows/Cone Assembly PN 1A5790A (CPS). For removal instructions, see Section 3, pages 3-31 and 3-32 of the Pro-Cam Service Manual.

When installing the new Assembly particularly note the several alignment points between the Assembly and the Mainframe as shown below.

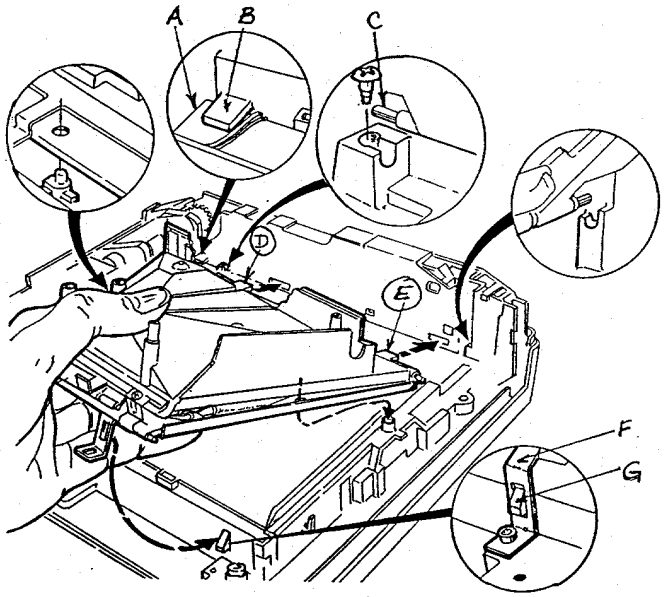


Figure 2 Replacing the Bellows/Cone Assembly

3.1 Compress the erecting hinge mechanism and hold the Bellows/Cone Assembly in the collapsed position as shown.

3.2 Holding the Assembly at an angle as shown, insert it into the Mainframe.

3.3 Metal edge "A" slips under lip "B" on the Gear Drive. Keep the wires from being caught under "A" or "B" - - route them as shown.

3.4 Seat end "C" of the hinge pin in its recess and then tabs "D" and "E" into their respective slots. Replace the screw holding "C".

3.5 Complete the installation by seating the Assembly on the Mainframe locating pins and engaging the Assembly legs on the Mainframe bosses ("F" and "G").

4. Reassemble the camera and check for proper operation and picture quality.

PARTS AVAILABILITY

Initial supplies of the new Bellows/Cone Assembly 1A5790A (CPS) will be shipped to NPKK, Enschede, and Atlanta. Additional quantities of the new Bellows/Cone Assembly as well as the Date Module Assembly 1B6725A, the Door Latch/Erect Assembly 1B6649A, and the ProCam Door/Erect Actuator Gage are now available from Material Services in Cambridge, Massachusetts.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. PROCAM #94-4
DATE: MAY 31, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: FRANK BLESZINSKI

SUBJECT: PROCAM DATE PRINT BACKGROUND MASK

PROBLEM

When scene brightness causes the top left corner of a ProCam picture to be very light, the numbers of the date print can be difficult or impossible to read. This can happen in outdoor pictures, for example, in which bright sky or bright objects occupy the date print area of the picture.

SOLUTION

A Date Module Mask (P/N 1B6748) has been developed which creates a **black** **rectangular** **background** area 1.5 x 0.5 cm behind the white date numerals, in the upper left corner of the print (see Fig. 1). This new Mask produces the black background in every picture, even if the Date Display is turned OFF.

A Mask Installation Tool (P/N B13605) has also been developed for installing the Mask.

Fig. 1 Black background date print after installing Date Module Mask

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

REPAIR POLICY

This modification should be done **only on customer request.** Be sure the customer understands that the **black background will appear in every picture,** even if the date display is turned OFF.

MASK INSTALLATION PROCEDURE (see Fig. 2)

1. Insert the Mask into the Installation Tool as shown in Inset "A" of Fig. 2, with the straight and angled edges of the Mask flush with the edges of the Tool jaw.

   CAUTION: Handle Mask edges carefully: they create the imaging edges in photo.

2. Latch the Tool arms to hold the Mask in place.

3. Open the Film Door and illuminate Date Module Tunnel with a work light.

4. Insert the Installation Tool with Mask into the film slot area, locating the angled side of the Mask toward the centerline of the Camera.

5. Locate the two tabs on the Mask above the DCM Mirror and below the top of the Tunnel Housing (Inset "B" of Fig. 2)

6. Press the Mask into the Tunnel until the two tabs click into place.

7. Unlatch the Tool arms and remove it from the Camera.

8. Inspect the Mask for proper fit and take test photo.

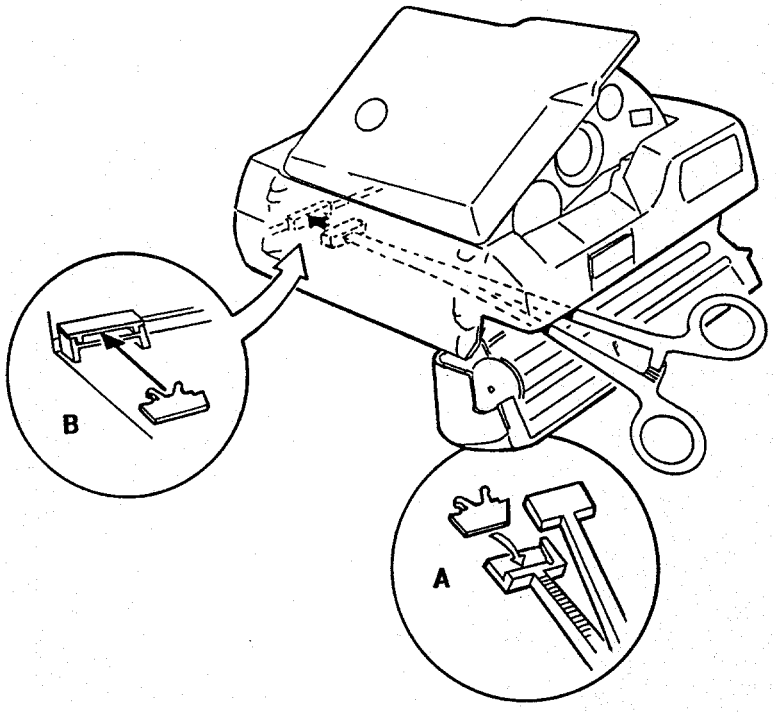


Fig. 2 Installing the Date Module Mask in a ProCam Camera

PARTS AVAILABILITY

Date Module Mask P/N 1B6748 and Mask Installation Tool P/N B13605 are now available from Material Services, Cambridge, MA. Order through normal sources.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. **PROCAM #94-5**
DATE: JUNE 29, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: FRANK BLESZINSKI

SUBJECT: **PROCAM EXPOSURE SPECIFICATION VALUES**

The Testing & Adjustments section of the ProCam Service Manual dated July 1993 contains a series of exposure tests for the camera. At the time the manual was written, the specification values for the camera had not been finalized. The purpose of this bulletin is to provide you with the testing specifcations. It is suggested that you file this bulletin in the ProCam manual and tape a copy next to the tester.

PROCAM EXPOSURE TESTING SPECIFICATIONS

Service Manual Page Number	Test	Specification
2-10	**Ambient Exposure**	**-.15 to +.35 stops**
2-12	**Strobe Exposure**	**-.35 to +.15 stops**
2-13	**ZLS Graywall**	**315 ZLS to 395 ZLS**
2-14	**Hybrid**	**1.50 to 2.25**
2-15	**Blade Speed**	**25 ms to 30 ms**

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. ProCam #95-6

DATE: April 19, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: FRANK BLESZINSKI

SUBJECT: PRO CAM CLOSE UP LENS REPLACEMENTS

BACKGROUND:

Some ProCam customers have made requests for replacement Close-Up Lenses, citing such reasons as lost, broken, or defective lens, or a lens not being packaged with the camera.

POLICY:

The plan for resolving these requests is to have the local Customer Service Representative provide the lens for the customer. Non-U.S. Customer Service Reps can order a supply of these lenses from Enschede, using **part number 1B6677A**. The question of whether or not to charge for lens replacements has been left to the determination of local Marketing Managers. They may choose to either absorb the cost or establish a local pricing structure.

ORDERING INFORMATION:

In U.S. markets, Close Up Lenses may be ordered through CPS Material Services, located at 201 Burlington Road in Bedford, Massachusetts. Outside the U.S., order through:

IDSC, Enschede, The Netherlands
Attn: J. Estevez or K. v.d. Veen.
FAX number - 31 53 82 1662
Phone numbers are 31 53 82 1334 or 31 53 82 1303.

Order as follows:

Part Description:	ProCam Close Up Lens
Part Number:	1B6677A
Unit Price:	$ 9.66 (U.S. Dollars)

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. 35mm #94-4

DATE: April 14, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

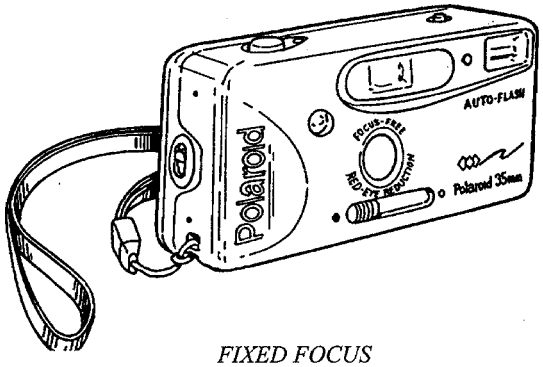
TO: LIST

FROM: FRANK BLESZINSKI

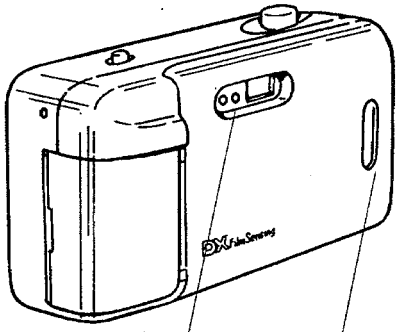
SUBJECT: INTRODUCTION OF TWO NEW POLAROID 35MM CAMERAS (FOCUS FREE AND AUTOFOCUS DATE BACK MODELS)

Background

Polaroid has been marketing two low cost 35mm cameras in the U.S. under the names "Polaroid One Film Camera - Autofocus" and "Polaroid One Film Camera - Fixed Focus". **These models will be discontinued.** To fill their place in the product family, a new line identified as the 1240 series, is being introduced. The 1240 line consists of two new compact 35mm cameras - an autofocus model with a date imprint feature and a focus free (fixed focus) autoflash model. These cameras have been designed and manufactured for Polaroid with an exclusive Polaroid body design. Introduction of the new cameras is planned for May of 1994 in the Americas, Australia, Scandinavia, and European Export markets. Other European introductions will coincide with the September 1994 Photokina Exposition. It is expected that the cameras will be introduced in a variety of kits which may include Polaroid 35mm color print film, AAA alkaline batteries, a pouch, a camera strap, an instruction booklet and the camera. Additional information can be obtained from the Polaroid 1240 Series Customer Service Information Manual.

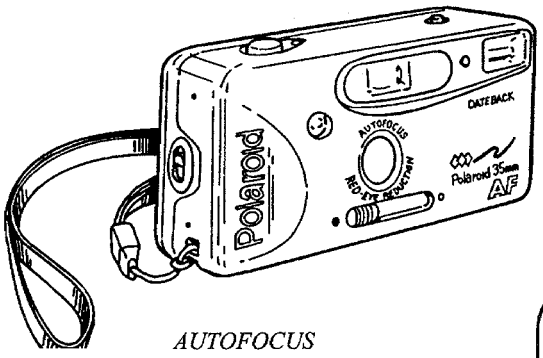


FIXED FOCUS
AUTOFLASH MODEL

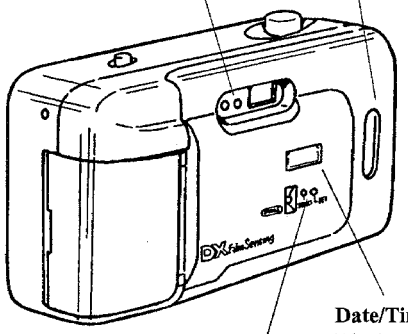


Film Identification Window

Red & Green LEDs



AUTOFOCUS
DATE IMPRINT MODEL



Date/Time Display Buttons

Date/Time LCD Display

Product Description

The Polaroid 35mm, low cost 1240 series cameras are easy-to-use, point and shoot (fixed focus and auto focus) models. They have features such as built-in electronic flash, a fill flash button, built-in automatic red eye reduction, easy film loading, automatic advancing, and powered rewinding. Although we recommend the use of Polaroid Color Print films In 12, 24 or 36 exposure rolls, the cameras can accommodate ISO 100, ISO 200 and ISO 400 speed color print film of all 35mm brands. ***We do not recommend using 35mm slide films with these cameras.***

Each model camera uses two 1.5 volt AAA alkaline batteries to power the automatic functions and the electronic flash. The cameras can also accommodate the use of a single DL123A 3 Volt Lithium battery or CR123A 3 Volt Lithium battery or equivalents.

A film identification window on the film door indicates the type of film loaded in the camera and the number of exposures in the roll. Also, a film counter window located on the top of the camera, indicates the number of pictures taken (1 - 36). During rewind, the counter counts backwards and "S" (Start) will appear after the film has been fully rewound. Whenever the camera door is opened, the counter resets to 'S" (start).

For ambient exposures, the focus distance for both camera models is 4' to infinity. For flash exposures, the range for both models is as follows:

4' (1.2m) to 10' (3.0m) using ISO 100 film.
4' (1.2m) to 12' (3.7m) using ISO 200 film.
4' (1.2m) to 14' (4.3m) using ISO 400 film.

The flash is automatic in both models and is turned on/off automatically by a sensor. On both models a red LED is on during charging to indicate **Do Not Fire**. Strobe charge is insufficient during this time and if an exposure is attempted, underexposed pictures may result. A green ready LED lights when the flash is charged, indicating **OK to Fire**.

The lens system for both cameras has two plastic elements and a coated glass front element. The system has a normal focal length of 34mm and an aperture of f/5.6 for both ambient and flash modes.

Serial Number

The serial number is located inside the camera door (see illustration below).

The first letter of the code identifies the assembly line which manufactured the camera. The next two digits indicate the month of manufacture. The fourth digit identifies the year of manufacture. Additional code letters or numbers will be used to identify significant changes in camera design, tooling or assembly.

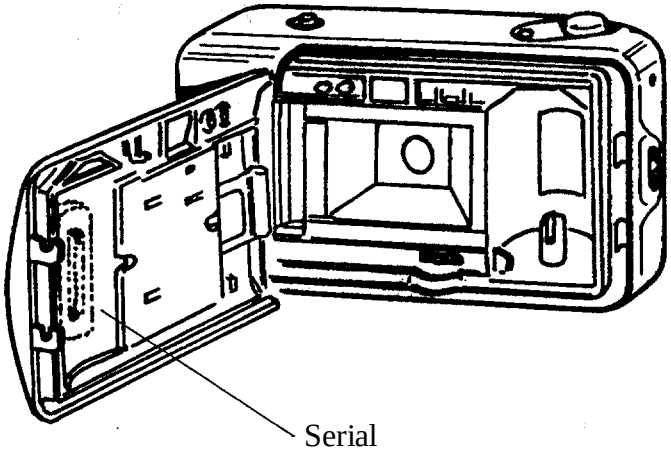
EXAMPLE: 3-074-D

3 indicates the camera was manufactured on assembly line #3

07 indicates the camera was manufactured during the month of July

4 indicates the camera was manufactured during 1 994

D indicates the version of the camera (supplier internal code)



Warranty

Polaroid offers a one year warranty on the cameras. Replacement cameras for dealer/customer returns will be provided by the manufacturer. Polaroid will send exchange units from inventory to its direct customers or wait issue dealer credit. Polaroid is responsible for maintaining inventories.

Defective customer and dealer-returned cameras to Enschede will be transferred to Atlanta for return to the manufacturer. Polaroid will not repair defective cameras.

In most cases, a customer will return a defective camera to the dealer. The dealer in turn, will either refund or replace the camera. These defective cameras will be returned to Polaroid through the dealer return policy in place and the dealer will receive credit from Polaroid. Polaroid Atlanta will accumulate all defective cameras for eventual shipment to the manufacturer. The manufacturer will provide new replacements to Polaroid.

Early Returns

The intent of the Early Returns Program is to insure rapid communication of problems in the field to appropriate Polaroid groups. This will result in expedient action being taken to solve problems and to help determine the level of product quality being supplied to Polaroid.

An early returns program will be in effect in Enschede for the return of 50 customer cameras of each model. An early returns program will also be in effect in Atlanta for the return of 100 customer or dealer cameras of each model.

Defective units will be analyzed by the Systems Quality and Reliability group for feedback to the manufacturer.

Repair Procedures

Defective cameras returned to Polaroid by dealers or customers will not be repaired by Polaroid. Polaroid will return defective cameras to the supplier for full replacement.

Out-of-warranty cameras will be handled by the designated Authorized Service Center

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. JOSH #94-7

DATE: JANUARY 17. 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: JOSHUA TEOUBLESHOOTING GUIDE

The Joshua Troubleshooting Guide attached was prepared by Camera Manufacturing and I am indebted to them for their time and effort represented.

Although the problems described in this Guide may not always be exactly the same as those seen by the field in the finished product, the Guide nonetheless will help - as we analyze and repair Joshua products - the types of failures/problems that can occur in specific areas.

The Guide covers the following topics, in two main areas:

A. Lower camera back Assembly

l. No darkslide - S1 Ok
2. No S1 cycle
3. No darkslide
4. Midcycle failure on darkslide
5. Counter won't Index
6. Dirt in Viewfinder
7. TMC won 't lay flat
8. Green light always on
9. Black bar
10. Camera cycles with door open

B. Final Camera Assembly

1. Viewfinder shadows

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

1. CHECK FOR MISSING FILM SHADE
2. CHECK DOOR STOP LINK N/S TO DOOR STOP
3. CHECK THREE WIRE SWITCH FOR DISTORTED
   LOWER WIRE SLIGHT BEND

NO S1 CYCLE

1. CHECK ERECT SENSOR - BIAS SENSOR OVER WITH STICK
2. CHECK FOR BENT WIRE UNDER FLEX PLUG (S1B)

TRIM	F I LM SPEED
S1B	S1-A
EOP	S1-B
DKEC	FULL C. L .

NO DARK SLIDE

1. BATTERY CONTACTS N/S
2. PLATEN N/S
3 FLEX PLUG N/S
4 3 WIRE SWITCH N/S TO FLEX STREETS
5. DOOR LATCH SENSOR STICKY
6. POWER ACTUATOR SPRING MISSING
7. SPRING MISSING
8. POOR CONNECTIONTO SHUTTER FLEX

MIDCYCLE FAILURE ON DARK SLIDE

1. PRIMARY PICK DOES NOT RETURN FULLY IN MAIN FRAME SLOT
2. DOOR LATCH SENSOR STICKY TRIP LATCH AND CHECK FOR DOOR LATCH SENSOR MOVEMENT
3. FULL CHAMBER LINK SEATED UNDER OVERIDE SLIDER
4. FULL CHAMBER LINK WIRE N/S
5. BROKEN POWER ACTUATOR
6. BATTERY CONTACTS N/S
7. VER TO B+
8. DKEC SWITCH
9. DOOR LATCH SENSOR HITS FLEX - NOT GLUED TO M/F
10. FLEX STREETS MlSREGISTERED

COUNTER WON'T INDEX

1. CHECK FOR BENT COUNTER DETENT

DIRT IN VIEWFINDER

1. (LOOK THROUGH EYE LENS) C.C. MIRROR DIRT DIRT MOVES AS VMC MOVES FROM ERECT TO CLOSE
2. (LOOK THROUGH SHUTTER LENS) FRESNEL MIRROR DIRT WILL BE IN SHARP FOCUS, C.C. MIRROR DIRT OUT OF FOCUS
3. (LOOK THROUGH EYE LENS) FRESNEL DIRT/SCRATCH ALWAYS IN SHARP FOCUS

TMC WON'T LAY FLAT

1. CHECK FOR BAFFLE WIRE N/S THOUGH HOLE(S) IN BAFFLE
2. CHECK BAFFLE D ISTORTION
3. CHECK FOR BENT TAKING BAFFLE WIRES
4. CHECK FOR D I RT I N MA I N FRAME SLOT FOR TMC
5. CHECK FOR INNER VIEW FINDER EYE LENS CLIP N/S TO MAIN FRAME
6. CHECK FOR LONG P I N - SHORT P I N
7. CHECK FOR INNER VF EYE LENS PUSHED IN TOO FAR AT BOTTOM
8. "S" FEATURE OF BAFFLE HITS TAKING MIRROR

GREEN LIGHT ALWAYS ON

1. CHECK FILM SHADE HANG UP

BLACK BAR

1. TAKING BAFFLE WIRE NOT SEATED IN BAFFLE PROPERLY
2. DISTORTED PlVOTS ON VIEWING MIRROR CARRIER
3. BENT TAKING BAFFLE WIRE(S)
4. BENT BAFFLE
5. FLASHING ON MAINFRAME PIVOT AREA
6. INNER VIEW FINDER EYELENS CLIP NOT SEATED
7. REAR SEAL NOT SEATED ON V.M.C.
8. BELLOWS NOT SEATED PROPERLY IN REAR SEAL
9. RECOCK LINK BENT FORWARD
10. FLASH ON MAIN FRAME ABOVE TMC PIVOT
11. BROKEN MAIN FRAME POST BY RECOCK LINK HOOK

CAMERA CYCLES W/ DOOR OPEN

1. CHECK THAT VER AND B+ WIRES ARE SEATED PROPERLY INTO DOOR LATCH SENSOR AND ERECT SENSOR
2. CHECK THAT DOOR LATCH IS IN THE MIDDLE OF THE BOTTOM CHUTE SLOT WHEN THE DOOR IS OPEN

POLAROID CORPORATION

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GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH #94-8

DATE: FEB 2, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: SERVICING JOSHUA CAMERA JAMS

BACKGROUND

Film jams are one of the leading reasons Joshua Cameras are being returned by customers. Generally, analysis of these returned Cameras reveals that mid-cycle has occurred.

POLICY

It is recommended that all Joshua Cameras have the new 5-Wire Detail Switch (P/N 1A2708A). If a Camera is returned for repair for any reason, then the 5-Wire Detail Switch and Drive Cover shall be changed (if not already present) to the latest configuration.

REDESIGNED 5-WIRE DETAIL SWITCH AND DRIVE COVER

In on-going, concentrated engineering efforts to significantly reduce the mid- cycle problem, Camera Design has made several design changes in certain parts, and these changes have been implemented in Cameras manufactured as early as April 1993.

The purpose of this Product Alert is to explain in which Joshua Cameras (by Serial Number and Configuration) a redesigned 5-Wire Detail Switch and two versions of the Drive Cover should be used during servicing. Table A later in this bulletin details the correct application of these parts.

The 5-Wire Detail Switch, P/N 1A2708A, has been redesigned with larger ground plane contact areas in the TRIM (Lighten/Darken) and DKEC (Darkslide/End of Cycle) Switches, to assure more positive switching (see Fig. 1).

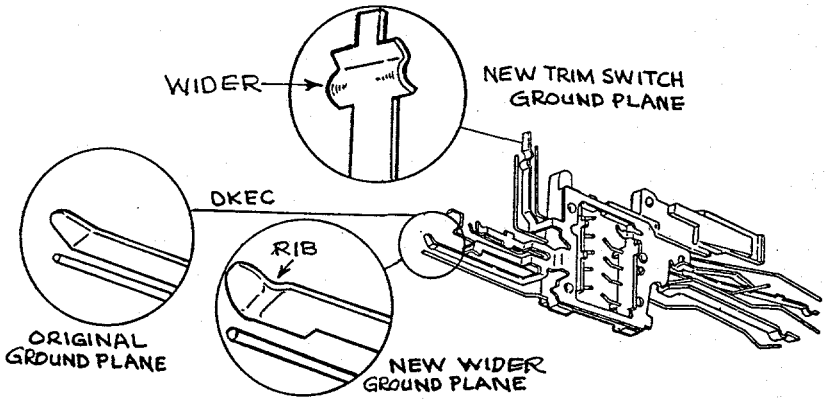


Fig. 1 New 5-Wire Detail Switch P/N 1A2708A

The Drive Cover has been modified to correct both a Viewfinder problem and contact bounce in the DKEC Switch, and is available in <u>two</u> <u>different</u> <u>forms:</u>

The **<u>Repair</u> Drive Cover** (P/N T22067SK01, see Fig. 2A) must be used when installing the new 5-Wire Switch in Cameras with the Serial Numbers and Configuration Codes shown in the <u>first</u> <u>three</u> <u>lines</u> <u>of</u> <u>Table</u> <u>A.</u> These Repair Covers are easily identified by a silver "X" marked on their upper side and two extended pins over the Viewfinder opening. On the Camera Mainframe, be sure the features in the Viewfinder area look like those in Fig. 2B. The extended pins on the Repair Cover seat in the two notches shown on the Mainframe.

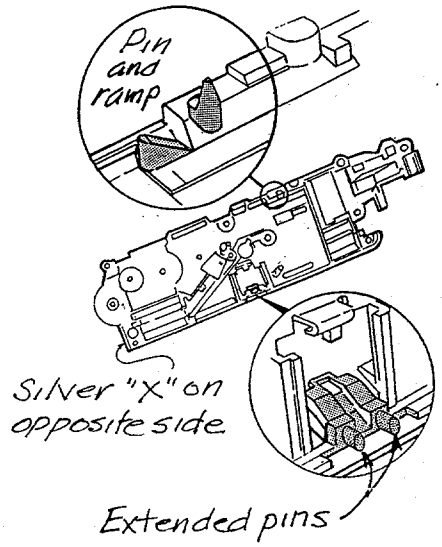


Fig. 2A Repair Drive Cover P/N T22067SK01

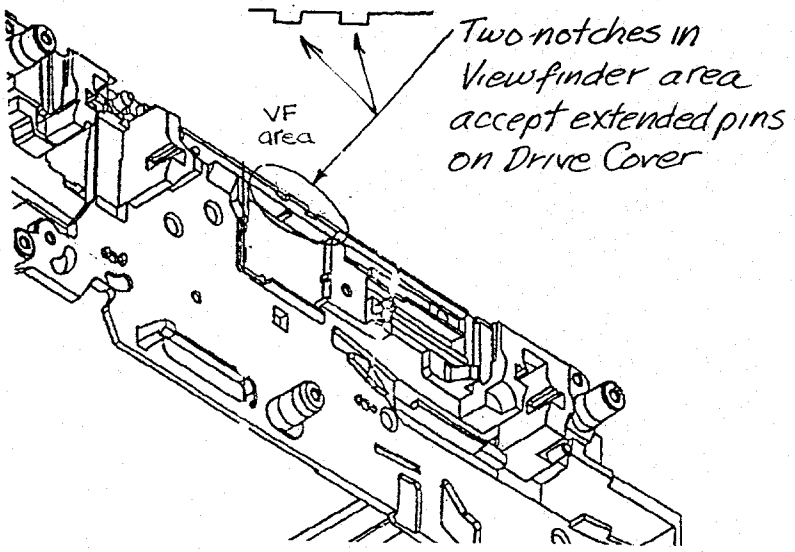


Fig. 2B Early Mainframe Configuration (takes Repair Cover at left)

A **new Drive Cover** (P/N 1A2067A, see Fig. 3A) has the notch, ramp and pin on its underside shown in the illustration. These Covers are for use in the Camera Serial Numbers and Configurations listed in the bottom four lines of Table A. The new Mainframe configuration is shown in Fig. 3B, and is identified by the raised central rib in the Viewfinder area.

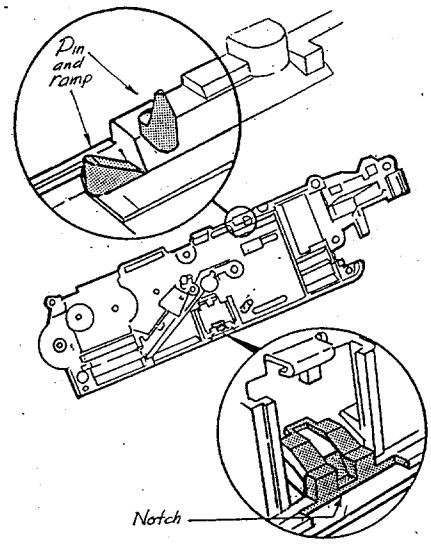


Fig. 3A New Drive Cover 1A2067A

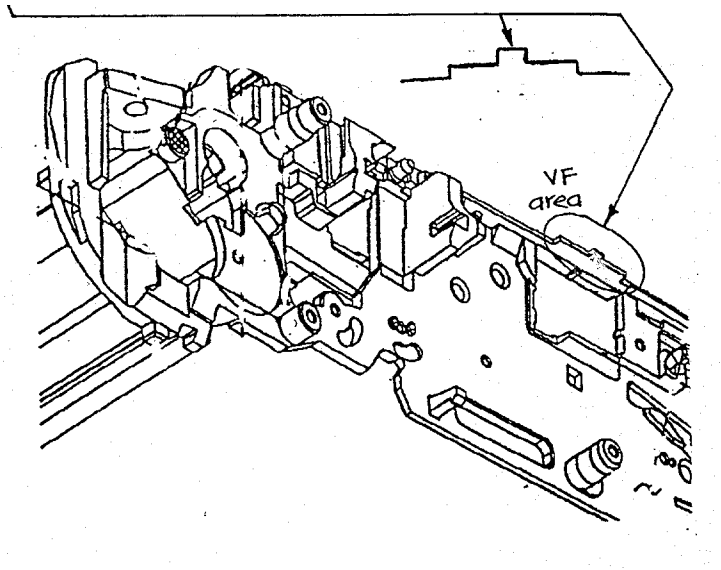


Fig. 3B Latest Mainframe Configuration P/N (takes new Drive Cover at left)

REPAIR PROCEDURES — PARTS APPLICATION

In all Joshua Cameras with the Serial Numbers and Configuration codes listed in Table A:

A. Replace the existing 5-Wire Detail Switch with the new Switch (P/N 1A2708A), unless the new Switch is in the Camera, and

B. Depending on the particular Camera Serial Number and Configuration, either
   - replace the Drive Cover with the Repair Cover (T22067SK01), or
   - reuse the old Drive Cover, or
   - install a new Drive Cover (1A2067A)

NOTE: During any repair, if the Camera has an early Mainframe with a plastic Gear #3, replace it with the new metal Gear #3 P/N 1A2808A

CAMERA ID AND CONFIGURATION CODE LOCATIONS

To read the Camera Serial Number, open the Picture Removal Door and read the first two characters of the Serial Number printed on the inside of the Door. (Example: In Serial Number G2LQB149NBFA, the ID "G2" indicates manufacture in July 1992.)

To read the Camera Configuration, open the Film Loading Door Assembly and disengage the Pack Frame from the Door Assembly (refer to Page 4-12 of the Service Manual). Now open up the Door Assembly enough to permit viewing the two- or three-character Configuration code marked on the Mainframe. It is located just below the Battery Contacts and near the Film Pick Assembly. The first two characters denote the gear side configuration; the third character denotes the configuration of the opposite side.

NOTE: After Oct. 93, the Configuration (previously marked in silver, grease pencil or lead pencil) is not marked on Mainframe.

To read the molded-in Mainframe Configuration, open the Film Loading Door Assembly and disengage the Pack Frame from the Door Assembly (see Page 4-12 of the Service Manual). Now open the Door Assembly enough to see the configuration letter molded in the Mainframe near the small projecting tab (see Fig. 4). NOTE: By inserting the tip of a small, bright penlight into the film chamber below the end of the Pack Frame, it may be possible to read the molded configuration letter without having to disengage the Pack Frame.

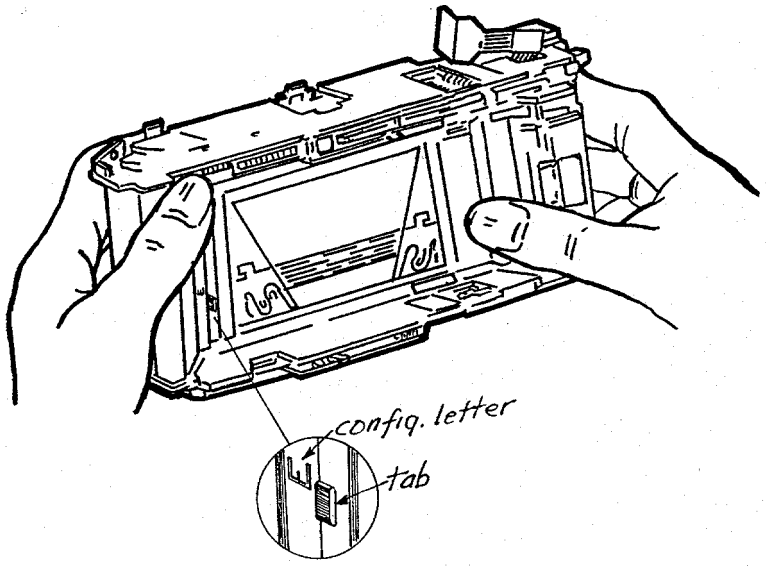


Fig. 4 Locating the molded-in Configuration letter

APPLICATION OF NEW PARTS

Camera Serial No.	**Silver ink Configuration**	**Molded-in Mainframe**	**Use Drive Cover No.:**
G2 thru L2	AE thru BLE	B	T22067SK01
L2,A3,B3,C3	BME thru CCG	E issue 8	T22067SK01
A3,B3,C3	CDG, CDH thru CNG & CNH	E issue 8	T22067SK01
C3,D3,E3, F3,G3	COG,COH thru DU	E issue 8	Reuse same Drive Cover (must have ramp and pin)
E3,F3,G3	DCG,DH,DJ,DQ	F	Use same or new 1A2067A Cover
F3,G3,H3, J3,K3	DV thru FD	F	Use same or new 1A2067A Cover
J3,K3,L3, M3	EP, FE thru FQ	Updated E (New Viewfinder Blind guiding)	Use same or new 1A2067A Cover
——	No longer on Mainframe	C	Use same or new 1A2067A Cover

Table A - Application of new parts

(Cont’d. on back)

INSTALLATION NOTE - 5-WIRE DETAIL SWITCH

After replacing the 5-Wire Detail Switch, check to be sure that sufficient clearance exists between the edge of the DKEC ground plane element and the Counter Wheel: use a feeler gauge or shim stock to verify that a minimum of 0.020" (0.51mm) to a nominal of 0.035" (0.89mm) exists (see Fig. 5).

Also, check that the DKEC wire element is centered over the DKEC ground plane element, for optimum operation.

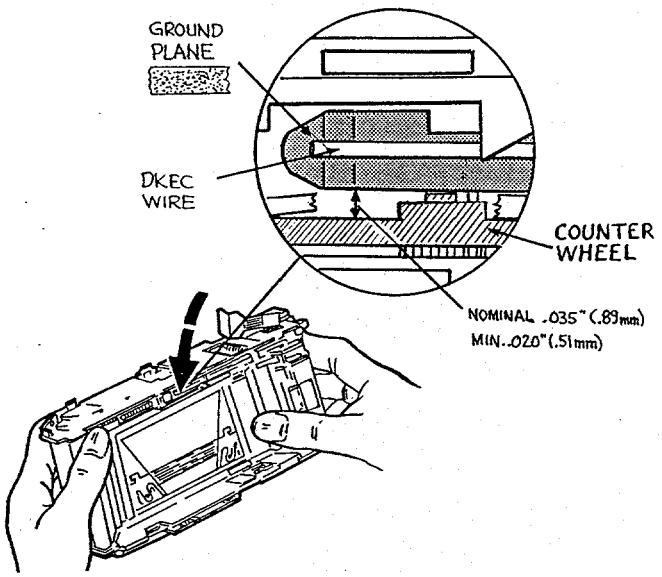


Fig. 5 Check clearance between DKEC ground plane and Counter Wheel

PARTS AVAILABILITY

The new parts listed in this Product Alert are available now from Material Services in Cambridge. Order from normal sources.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH #94-9

DATE: FEBRUARY 24, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** JOSH

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: JOSHUA SERIES CAMERAS – CONFIGURATIONS "A" THROUGH "D"

Configuration "D" has now been announced for all Joshua-series Cameras, indicating the addition of a Rear Lens Baffle which mates with a revised Baseblock and the crescent fix in all Joshua "A" Cameras. The crescent fix is described in detail in another Joshua Product Alert.

The "D" designation appears as the 10th character of the 12-character serial number, located on a label inside the Camera and visible when the Front Door is opened.
Previously announced Joshua configurations are summarized below:

Configuration Letter	Effective Date	Description
A	7/29/92	Baseline Configuration
B	3/15/93	Non-Scratch Fix
C	8/23/93	Date+ Camera Series/Crescent Fix
D	9/24/93	Added Rear Lens Baffle, revised Baseblock Crescent Fix fully implemented by 9/27/93

On the reverse side of this bulletin is an explanation of the information contained in the 12-character Serial Number code.

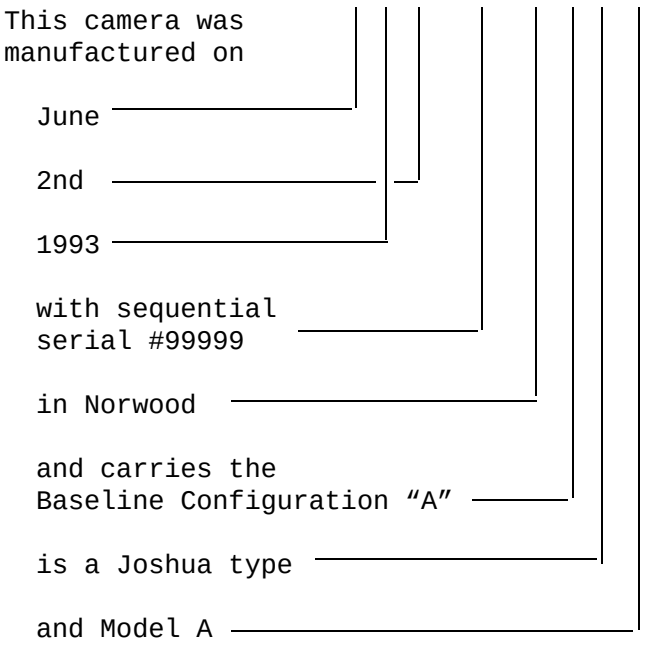
THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

SERIAL NUMBER CODE (JOSHUA SERIES CAMERAS)

The serial number contains the following information:

1st charac.	2nd charac.	3rd charac.	4th-8th charac. (letter/#)	9th charac.	10th charac.	11th charac.	12th charac.
Month	**Year**	**Day of the month**	**Consecutive Serial No.**	**Manufacturing Location**	**Config. letter**	**Product Group**	**Model**
A=Jan	7=1987	A = 1	00001	N = Norwood	A - Z	F	A = Mod A
B=Feb	8=1988	B = 2		V = Vale of			
C=Mar	9=1989	etc.	thru	Leven	(I & O	Joshua	
D=Apr	0=1990	Z = 24		C = China	omitted)		B = Date+
E=May	1=1991	5 = 25	99999				
F=Jun	2=1992	6 = 26			A = Baseline		
G=Jul	3=1993	7 = 27					
H=Aug	4=1994	8 = 28					
J=Sep	5=1995	9 = 29			B = Non-scratch		
K=Oct	6=1996	0 = 30					
L=Nov	7=1997	1 = 31					
M=Dec	etc.				C = Date+ series/ Crescent fix		
(I omitted)		(I & O omitted)					
					D = Rear Lens Baffle, rev. Baseblock & Cres. fix fully implem. by 9/27/93		
					E = Shutter PC Bd to ROM 11 and new Timing Gear 1A2077B.		

Example: F 3 B 99999 N A F A



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GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-9A*

DATE: JULY 5, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

***(This is an UPDATE of Product Alert JOSH #94-9, dated 2/27/94)**

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: JOSHUA A and DATE+ – CONFIGURATION "E" ADDED TO "A" THROUGH "D"

Configuration "E" is announced for Joshua A and Date+ Cameras, indicating that the Shutter PC Board is upgraded to the ROM 11 chip and a new Timing Gear 1A2077B is being used. How these new components help reduce mid-cycle and film jams is described in Product Alert JOSH 94- dated .

The "E" designation appears as the 10th character of the 12-character serial number, located on a label inside the Camera and visible when the Picture Removal Door is opened.
All present Joshua configurations are summarized below:

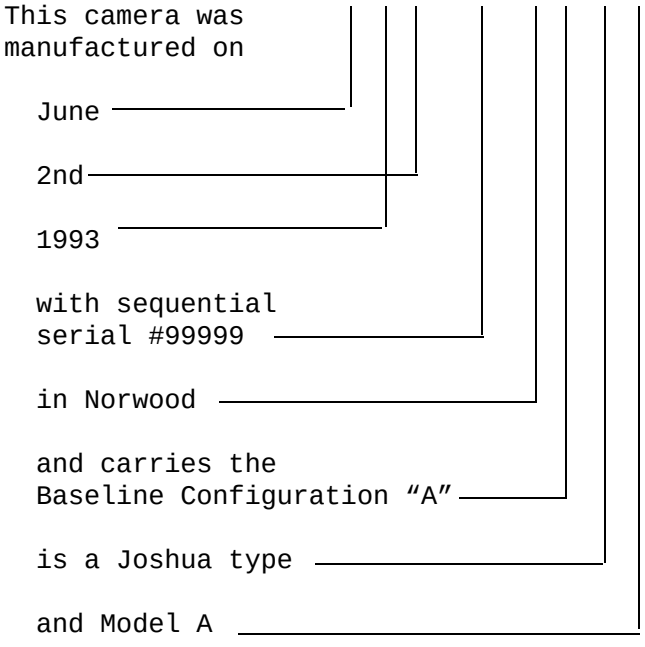
Configuration Letter	Effective Date	Description
A	7/29/92	Baseline Configuration
B	3/15/93	Non-Scratch Fix
C	8/23/93	Date+ Camera Series/Crescent Fix
D	9/24/93	Added Rear Lens Baffle, revised Baseblock, Crescent Fix fully implemented by 9/27/93 (Film Support)
E	**5/5/94**	**ROM 11 on Shutter PC Board, and new Timing Gear**

On the reverse side of this bulletin is an explanation of the information contained in the 12-character Serial Number code.

The serial number contains the following information:

1st charac.	2nd charac.	3rd charac.	4th-8th charac. (letter/#)	9th charac.	10th charac.	11th charac.	12th charac.
Month	**Year**	**Day of the month**	**Consecutive Serial No.**	**Manufacturing Location**	**Config. letter**	**Product Group**	**Model**
A=Jan	7=1987	A = 1	00001	N = Norwood	A - Z	F	A = Mod A
B=Feb	8=1988	B = 2		V = Vale of			
C=Mar	9=1989	etc.	thru	Leven	(I & O	Joshua	
D=Apr	0=1990	Z = 24		C = China	omitted)		B = Date+
E=May	1=1991	5 = 25	99999				
F=Jun	2=1992	6 = 26			A = Baseline		
G=Jul	3=1993	7 = 27					
H=Aug	4=1994	8 = 28					
J=Sep	5=1995	9 = 29			B = Non-scratch		
K=Oct	6=1996	0 = 30					
L=Nov	7=1997	1 = 31	M=Dec	etc.	C = Date+ series/ Crescent fix		
(I omitted)		(I & O omitted)					
					D = Rear Lens Baffle, rev. Baseblock & Cres. fix fully implem. by 9/27/93		
					E = Shutter PC Bd to ROM 11 and new Timing Gear 1A2077B.		

Example: F 3 B 99999 N A F A



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GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-9B

DATE: FEBRUARY 22, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

***(This is an UPDATE of Product Alert JOSH #94-9A, dated 7/5/94)**

SUBJECT: JOSHUA BADGECAM – CONFIGURATION "F" ADDED TO "A" THROUGH "E"

Configuration "F" is announced for Joshua Series Cameras, to indicate the BadgeCam and BadgeCam Date versions of Joshua. These new models in the Joshua series, designed for making full-color, instant ID badges at low cost, are described in New Product Information bulletin 95-22, dated Feb. 22, 1995.

The "F" designation appears as the 10th character of the 12-character serial number, located on a label inside the Camera and visible when the Picture Removal Door is opened.
All present Joshua configurations are summarized below:

Configuration Letter	Effective Date	Description
A	7/29/92	Baseline Configuration
B	3/15/93	Non-Scratch Fix
C	8/23/93	Date+ Camera Series with Crescent Fix
D	9/24/93	Added Rear Lens Baffle, revised Baseblock, Crescent Fix fully implemented by 9/27/93 (Film Support)
E	5/9/94	ROM 11 on Shutter PC Board, and new Timing Gear
F	**9/26/94**	**BadgeCam and BadgeCam Date camera models**

On the reverse side of this bulletin is an explanation of the information contained in the 12-character Serial Number code.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

The serial number contains the following information:

1st charac.	2nd charac.	3rd charac.	4th-8th charac. (letter/#)	9th charac.	10th charac.	11th charac.	12th charac.
Month	**Year**	**Day of the month**	**Consecutive Serial No.**	**Manufacturing Location**	**Config. letter**	**Product Group**	**Model**
A=Jan	7=1987	A = 1	00001	N = Norwood	A - Z	F	A = Mod A
B=Feb	8=1988	B = 2		V = Vale of Leven	(I & O omitted)	Joshua	
C=Mar	9=1989	etc.	thru				
D=Apr	0=1990	Z = 24		C = China			B = Date+
E=May	1=1991	5 = 25	99999				
F=Jun	2=1992	6 = 26					
G=Jul	3=1993	7 = 27					
H=Aug	4=1994	8 = 28					
J=Sep	5=1995	9 = 29					
K=Oct	6=1996	0 = 30					
L=Nov	7=1997	1 = 31 (I & O omitted)		M=Dec	etc.		
(I omitted)							

Example: F 3 B 99999 N A F A

This camera was manufactured on

June

2nd

1993

with sequential serial #99999

in Norwood

and carries the Baseline Configuration “A”

is a Joshua type

and Model A

A = Baseline

B = Non-scratch

C = Date+ series/ Crescent fix

D = Rear Lens Baffle, rev. Baseblock & Cres. fix fully implem. by 9/27/93

E = Shutter PC Bd to ROM 11 and new Timing Gear 1A2077B.

F = BadgeCam & BadgeCam Date Camera versions

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GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. JOSH 94-10
DATE: MARCH 31. 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: JOSHUA 5-WIRE DETAIL SWITCH WITH GOLD-PLATED GROUND PLANE CONTACTS P/N 1A2708B

In continuing engineering efforts to reduce the midcycle problem in Joshua series cameras, the 5-Wire Detail Switch, P/N 1A2708A, has undergone two design changes.

The first change increased the ground plane contact area of the TRIM (L/D) Switch and the DKEC (Darkslide/End of Cycle) Switch. This improvement is described and illustrated in Product Alert JOSH 94-8, dated 2-2-94.

The latest change embodies gold-plating the ground plane switch contact elements, to lower resistance and improve switching reliability. Some Switches will have all ground plane contacts gold-plated, while others will have only certain elements gold-plated. All versions, however, may be used interchangeably.

The 5-Wire Detail Switch with gold-plated contact areas has been incorporated in Cameras since mid-February, 1994.

REPAIR POLICY

All Cameras returned for repair should have the new 5-Wire Detail Switch 1A2708B installed, along with other updating described in Product Alert JOSH 94-8.

PART AVAILABILITY

This Switch (P/N 1A2708B) will be available on and after the end of March 1994, from Material Services in Cambridge. Order through normal sources.

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-11

DATE: APRIL 5, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: **IMPROVED JOSHUA FLEX PLUG FOR SWITCH BLOCK (P/N 1A2905A)**

BACKGROUND

In the continuing engineering efforts directed at product improvement, the Flex Plug for the Switch Block now has a tab added to it which helps ensure proper orientation of both the Plug and the Flex when the Plug is inserted. This improved design is identified by the issue 05 designation ("IS05") molded into its top surface (see Fig. 1).

REPAIR POLICY

An issue 5 or later Flex Plug should be used:

1. Whenever the Flex Plug, Switch Block (of any issue) is removed from the Camera (removing the Flex Plug subjects it to stress; replacement with a new Plug is recommended), and

2. Whenever work is performed using an updated 5-Wire Detail Switch P/N 1A2708A or P/N 1A2708B; Repair Drive Cover T22067SK01; or the new Drive Cover 1A2067A.

(These parts and their application in Joshua repair procedures are described and shown in Product Alerts JOSH #94-8 and JOSH 94-10. The 5-Wire Detail Switch P/N 1A2708B, and Flex Plug, Switch Block 1A2905A Issue 05 will be used in Cameras manufactured beginning late February/early March 1994.

PART AVAILABILITY

The Flex Plug, Switch Block, Issue 05, P/N 1A2905A is available now from Material Services in Cambridge, MA. Order from normal sources.

When issue 05 parts are obtained, discard existing stocks of the part which are older than Issue 5.

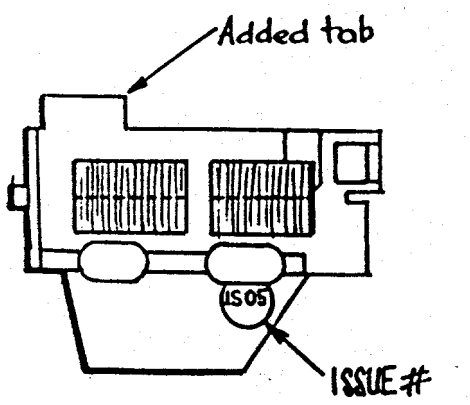

Fig. 1 Improved design of Joshua Flex Plug Switch Block

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-12
DATE: MARCH 31, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **RUSSELL D. BATTLE**

SUBJECT: **REAR LENS BAFFLE ADDED TO JOSHUA BASEBLOCK**

BACKGROUND

To minimize the potential problem of light spilling outside normal paths in the Joshua Shutter Assembly, a new part was added to the Baseblock and the Baseblock itself was modified to accept the part, in Joshua series Cameras manufactured after August, 1993.

The new part is a Rear Lens Baffle (P/N 1A2723A) shown in Fig. 1. It can be used only with the modified Baseblock Assembly (P/N 1A2573A); earlier Baseblocks do not provide clearance beneath a tab to allow insertion of the Rear Lens Baffle.

PART AVAILABILITY

The Rear Lens Baffle and modified Baseblock Assembly will be available by April 30, 1994 from Material Services in Cambridge. Order through normal sources, as needed.

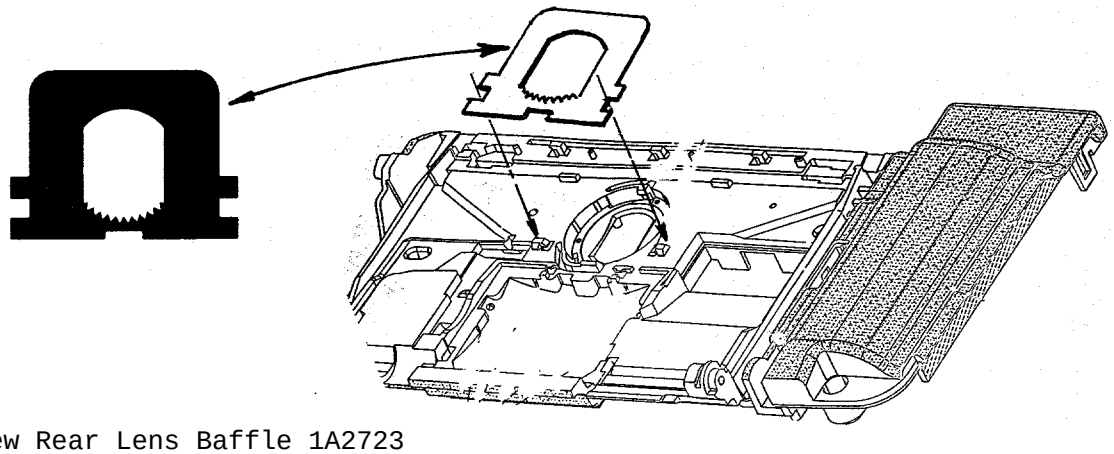

Fig. 1 New Rear Lens Baffle 1A2723 for Joshua Cameras

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-13

DATE: APRIL 5, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: NEW JOSHUA SHUTTER FLEX CONNECTOR CAP & REMOVAL TOOL

PROBLEM

Partial or crooked insertion of a Joshua Shutter Flex Connector Cap can cause a variety of problems, including no power to the Shutter, no darkslide, a midcycle, shorts, etc. These are the result of mismatched, shorted or absent electrical connection between misaligned Connector contacts and the Flex streets (see Fig. 1). In addition, the Connector Cap could be difficult to remove without breaking.

SOLUTION

To answer these and other problems, a new Flex Connector Cap (P/N 1A2358A), Issue 2 and above (see Fig. 4), and a Retainer Removal Tool (P/N 13589) have been developed. As Figs. 2 - 4 show, the Tool has a thin blade with a beveled, hook tip. When the blade is inserted straight into the Connector Cap, it disengages the Cap's internal locking tab. The hook or tang on the tip of the blade facilitates lifting the Cap straight up and off the Connector.

PARTS AVAILABILITY

The Flex Connector Cap and Retainer Removal Tool will be available after Mar. 1, 1994 from Material Services in Cambridge, MA. Order through normal sources.

REPAIR POLICY

Once the Connector Cap has been removed, it is recommended that a new Cap is used, since the old one may have been damaged. Discard existing stocks of the old Connector Cap.

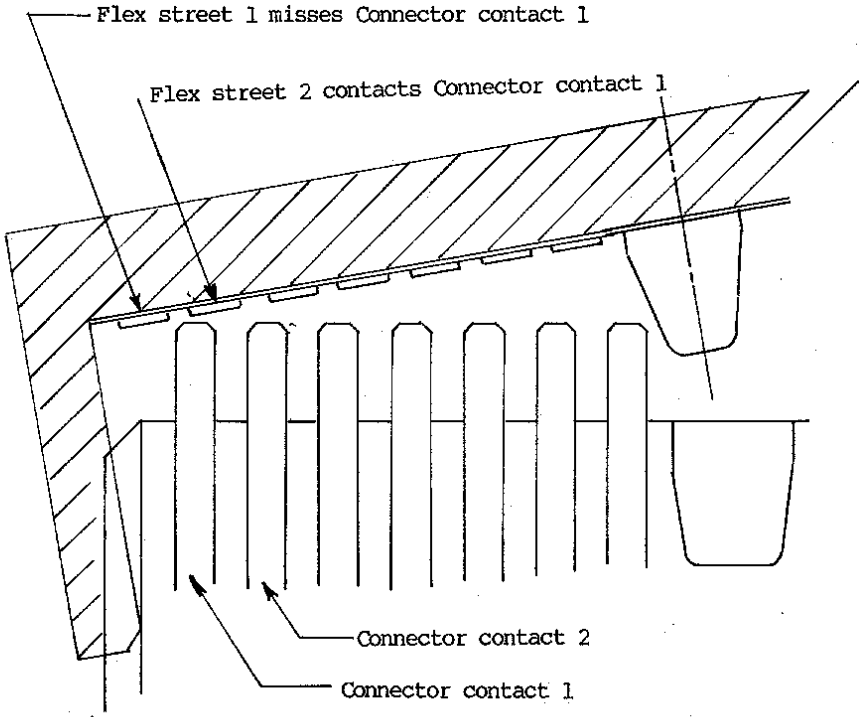
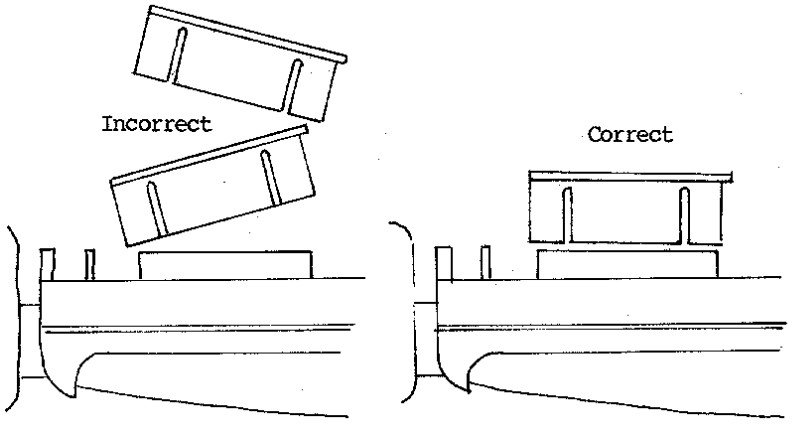

Flex street 1 misses Connector contact 1
Flex street 2 contacts Connector contact 1
Connector contact 2
Connector contact 1

Fig. 1 Connector Cap incorrectly inserted at an angle misaligns Flex streets and Connector contacts



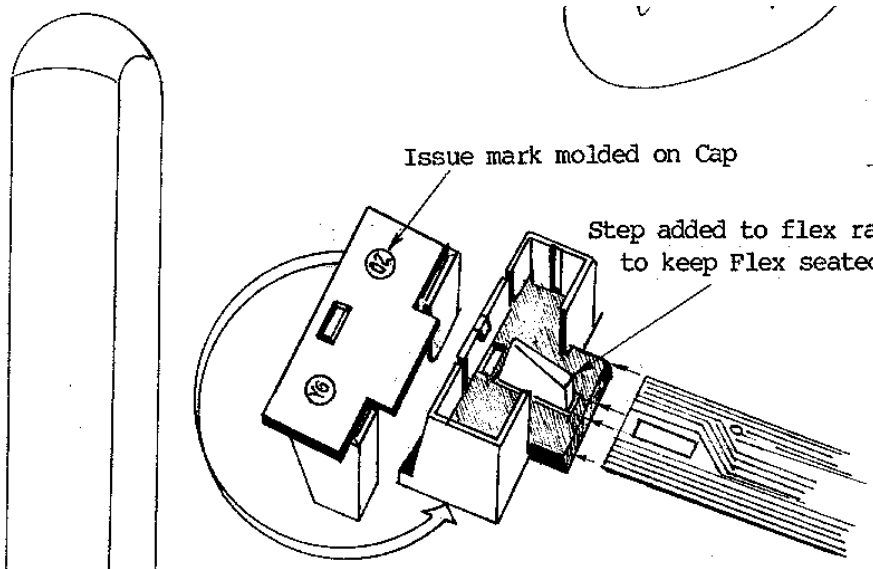
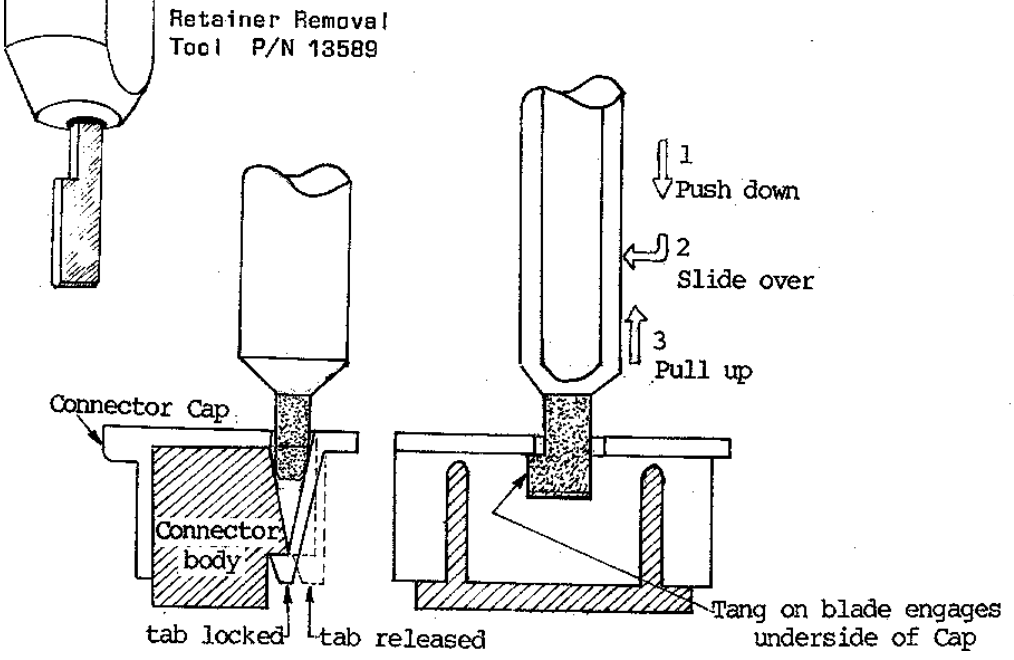


Fig. 4 New Flex Connector Cap P/N 1A2358A



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NEW PRODUCT INFORMATION

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-14

DATE: JULY 11, 1994

TECH. SERVICES: **MAT'L SERVICES:**

QUAL. CONTROL: **OPERATIONS:**

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: NEW CAPTIVA QPS PREMIUM CAMERA (PID# 1A2614)

A limited quantity of a Captiva Cameras for use as a premium in the U.S. market was manufactured in the first quarter of 1994.

The Camera is identical to the present Captiva, except for **QPS** imprinted on the Top Cover (P/N 1A2933J) (see Fig. 1).

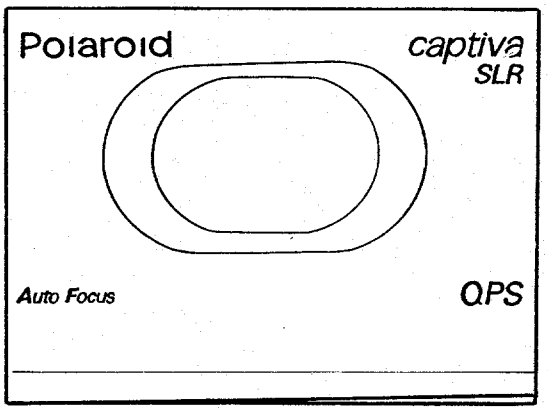

Fig. 1 Top Cover of Captiva "QPS" premium Camera

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-15
DATE: JULY 11, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: NEW JOSHUA PICK ASSEMBLY (P/N T12540SK09)

The Pick Assembly P/N 1A2540A used in Joshua Cameras from 1992 until mid-June 1993 was redesigned in 1993. The new design has been used in all Joshua Cameras since mid-June 1993.
The new Pick Assembly is P/N T12540SK09 and is shown in Fig. 1. It is easily differentiated from the earlier design by the **absence** of the flag on the Pick Carrier (see dotted outline identified by arrow in Fig. 1), and by the reduced tab height (balloon callout).

NOTE: The new Pick Assembly P/N T12540SK09 **MUST BE USED** in Joshua-series Cameras manufactured from mid-June 1993 onward.

NOTE: Old Pick Assemblies (with flag) can be identified in older Cameras manufactured before mid-June 1993 by moving the Pick forward and viewing the flag in the bottom of the Viewfinder.

REPAIR POLICY

Change the Pick Assembly only if it is defective.

PART AVAILABILITY

Pick Assembly P/N T12540SK09 is available from Material Services in Cambridge. Order through normal sources.
The older Pick Assemblies are **not interchangeable** with the new P/N T12540SK09 design: thus you should maintain supplies of both styles.

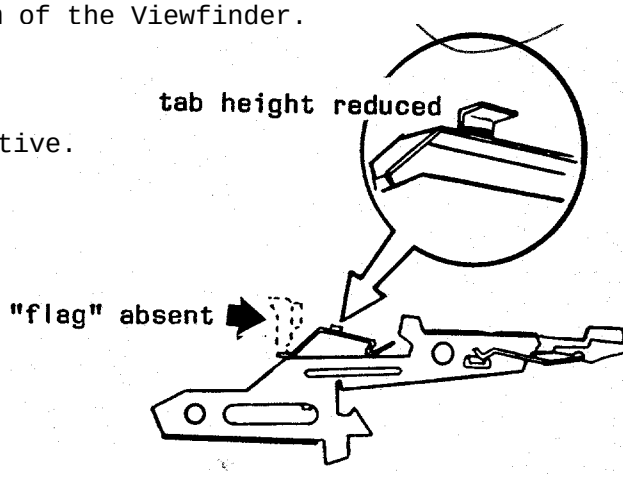

Fig. 1 Redesigned Pick Assy P/N T12540SK09

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Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. _____
DATE: _____

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: NEW JOSHUA COUNTER WHEEL (P/N 1A2084B)

In June 1994, Camera Manufacturing began installing new Counter Wheels (Fig. 1) in all Joshua-series cameras.

Both of the new Counter Wheels have a slightly shorter and wider cam or tab to actuate the End Of Pack (EOP) Switch, to solve a problem caused by interference with the EOP switch wire. This wire could trap the Counter Wheel, producing a false End Of Pack signal and preventing the Counter Wheel from resetting.

POLICY

Either the interim or new style Counter Wheel should be installed whenever:

1. A new 5-Wire gold-contact Detail Switch upgrade is done (see JOSH 94-__) or

2. The customer reports an EOP signal when depressing the Shutter Button (Counter stuck on "0").

PART AVAILABILITY

The new Counter Wheel P/N 1A2084B is available from Material Services in Cambridge, MA. Please order through normal sources. Note that Material Services will stock only the latest Counter Wheel. When you receive your supply of new counter wheels, you should scrap all old Joshua Counter Wheels.

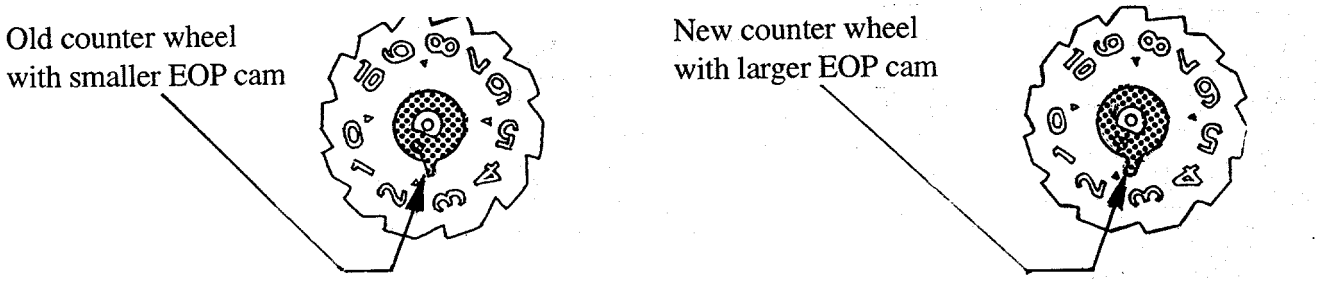

Fig. 1 New Joshua Counter Wheel (right) with enlarged EOP cam

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-17
DATE: JULY 11, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: NEW PLASTIC LENS FOR VISION CAMERAS

On Jan. 1, 1994, Manufacturing began using a new plastic taking lens in all Vision Cameras. Accompanying this change, the Decorative Plate was also changed to eliminate the words “coated glass lens” (left hand illustration, Fig. 1). Cameras with the new plastic lens may be identified by a narrow space between the lens surface and bezel (see arrow in right hand illustration, Fig. 1).

NOTE: In 1994, **only** the *JoyCam, Joshua Date+* and *special edition* cameras have a glass lens. Captiva Cameras have always had plastic lenses.

PARTS AVAILABILITY

The plastic Taking Lens (P/N 1A2031B) and accompanying Decorative Plate(P/N 1A2157K) will be available 8/1/94 from Material Services in Cambridge, MA. Order through normal sources.

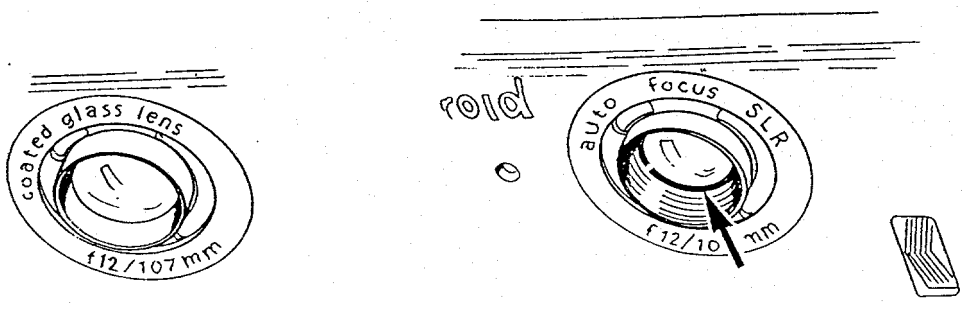

Fig. 1 Vision glass lens (left); new plastic lens & dec plate (right)

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-18

DATE: AUGUST 1, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: NEW ROM-11 SHUTTER PC BOARD/FLASH TUBE ASSEMBLY & TIMING GEAR FOR JOSHUA A AND DATE+

BACKGROUND

In the continuing effort to improve camera performance reliability and quality, engineering has upgraded the Joshua Shutter PC Board/Flash Tube Assembly to use a ROM 11 integrated circuit, and improved the Timing Gear. These changes were made in Joshua A and Date+ models, beginning with mid-May, 1994 (E4) production.

The new ROM was installed to help reduce film jams and/or mid-cycle problems. Specifically, it ignores the Full Chamber Switch (a source of electrical contact noise – see Fig. 1) and, in conjunction with the new Timing Gear, allows the DKEC switch to electrically open and close only once per cycle, not twice as previously. (Note the cam action of the Timing Gear in Fig. 2.)

PART NUMBERS

The ROM-11 Shutter PC Board/Flash Tube Assembly for **Joshua A** Cameras is P/N 1A2485E. For the **Joshua Date+,** the ROM-11 Shutter PC Board/Flash Tube Assembly is P/N 1A2438D. They are **not** interchangeable. The new Timing Gear, which must be used with the new PC Board/Flash Tube Assembly, is P/N 1A2077B (see Fig. 2).

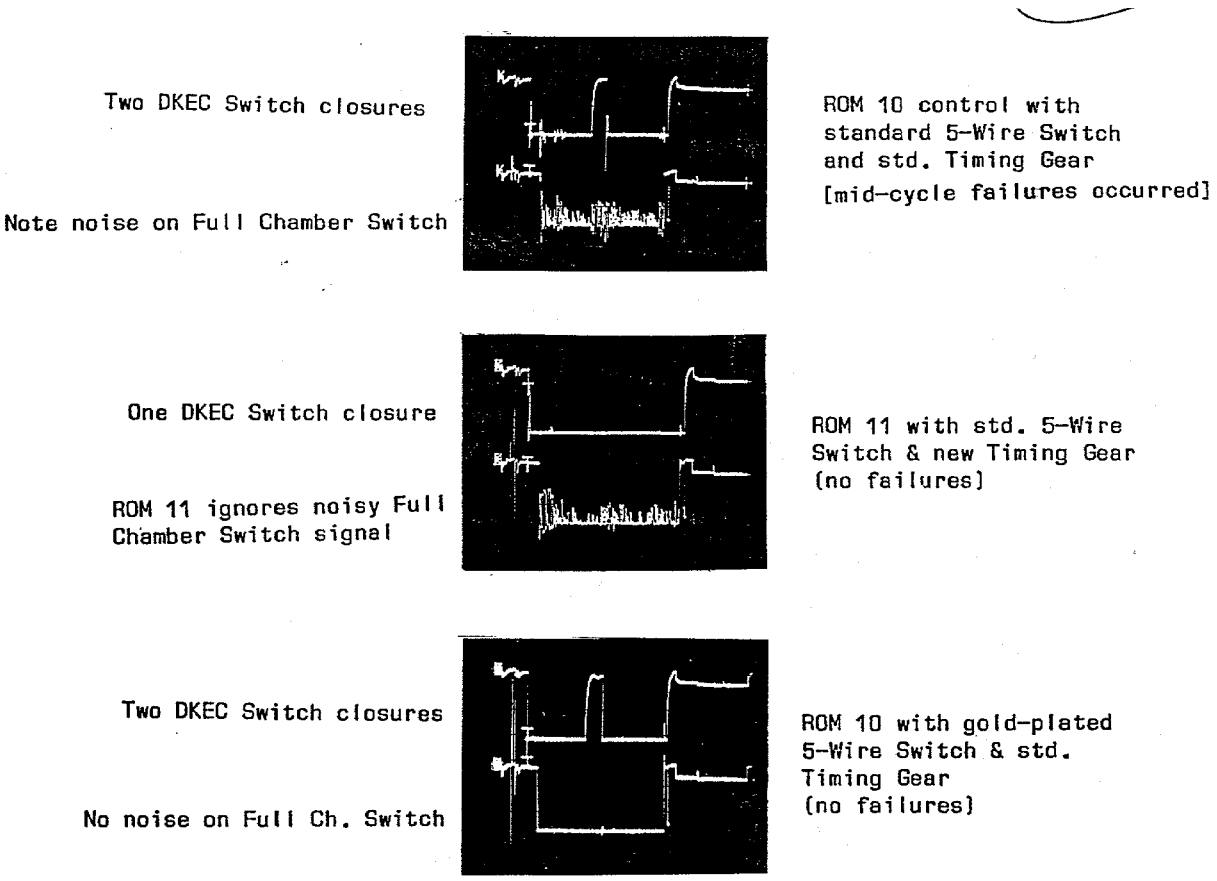
Two DKEC Switch closures
Note noise on Full Chamber Switch
ROM 10 control with standard 5-Wire Switch and std. Timing Gear [mid-cycle failures occurred]
One DKEC Switch closure
ROM 11 ignores noisy Full Chamber Switch signal
ROM 11 with std. 5-Wire Switch & new Timing Gear (no failures)
Two DKEC Switch closures
No noise on Full Ch. Switch
ROM 10 with gold-plated 5-Wire Switch & std. Timing Gear (no failures)

Fig. 1 DKEC and FULL switch traces with ROM 10, ROM 11 & gold switch contacts

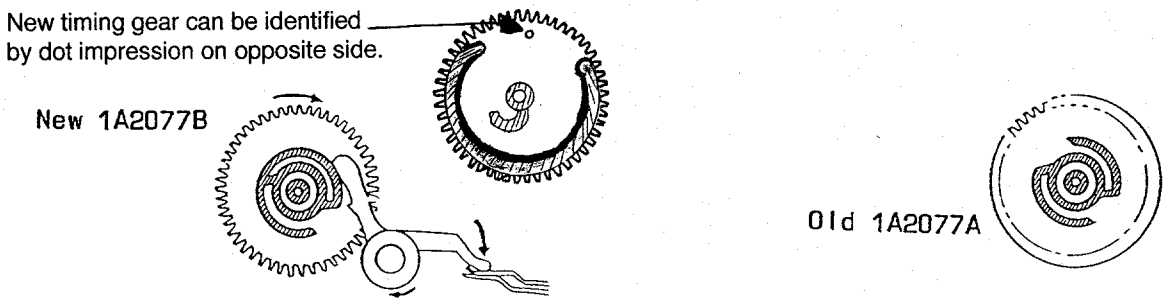

Fig. 2 New Timing Gear 1A2077B (left) used with ROM 11 PC Board/ Flash Tube Assy

Old Timing Gear 1A2077A (right) used with ROM 10 and earlier ROM PC Board/Flash Tube Assemblies back to 1992

IDENTIFYING CAMERAS WHICH HAVE THE ROM 11 PC BOARD

To determine whether a camera contains a ROM 11 PC Board, remove the Dec Plate and look for the letters **CL, SL, S, C** or a **+** sign scribed in ink on the Front Shutter Housing (see Fig. 3). Also, look to see if the number 11 is marked on the Drive Cover, as shown in Fig. 3. The "11" marking was discontinued in July 1994.
In the Camera Serial number, note that Cameras with the ROM 11 PC Board/Flash Tube Assembly will be marked configuration "E." Please refer to Joshua Product Alert **94-9A** (this is a revision of JOSH 94- 9, originally published 2/24/94).

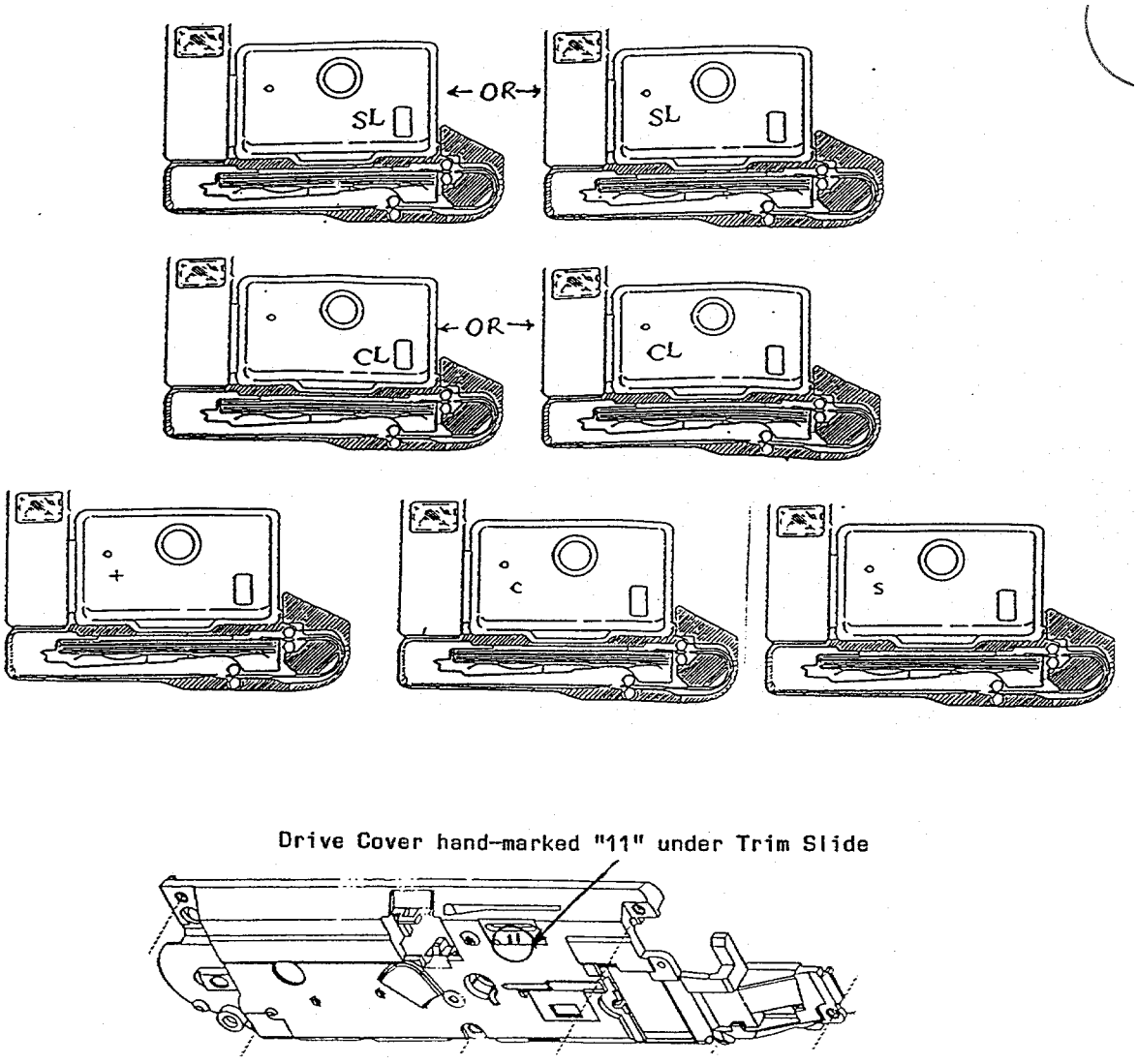

Fig. 3 Various Shutter markings identifying ROM 11 installations

REPAIR POLICY

Cameras received for repair with a defective ROM 10 or earlier PC Board/Flash Assembly should have the Assembly replaced with a ROM 10 Assembly, if available. In addition, the 5-Wire Switch and Counter Wheel should be replaced with the new gold 5-Wire Switch and new Counter Wheel, respectively (see JOSH 94-10).

When ROM 10 Assemblies are depleted, use ROM 11 Assemblies with the new Timing Gear and gold Switch.

NOTE: A “ROM 10” Timing Gear (1A2077A) works ONLY with a “ROM 10” and earlier (ROM 9, 8, 7, etc.) Shutter PC Board/Flash Tube Assy (P/N 1A2432A).

A mismatch of Timing Gear and PC Board/Flash Tube Assy may result in a midcycle or jam.

If a Camera has a defective ROM 11 Shutter PC Board/Flash Tube Assembly, it must be replaced with the new ROM 11 Assembly.

Replace ROM 10 or earlier with:	and change to:		
	Gold Switch	New Timing Gear	New Counter Wheel
ROM 10	X		X
ROM 11	X	X	X

TEST EQUIPMENT CHANGE

There is a test equipment change required to test this ROM 11 PC Board/Flash Tube Assembly in the ambient mode. (Present equipment permits testing in the flash mode.) Details of this test equipment change will be forthcoming.

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-19
DATE: JULY 11, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: NEW JOSHUA VIEWING MIRROR CARRIER/BELLOWS ASSEMBLY

Shortly, Camera Manufacturing will began installing a new Viewing Mirror Carrier/ Bellows Assembly in all Joshua-series cameras. The new VMC, P/N 1A2114B, has thicker mounting tabs ("A" in Fig. 1), to solve a problem of the VMC slipping out of the Baseblock and causing light leaks. To accept the new, thicker VMC tabs, the mating slots in the Baseblock have also been enlarged. The new Baseblock is P/N 1A2573D.

Inventories of **both** old VMC/Bellows Assembly (P/N 1A2114A) and the new VMC/Bellows Assembly (P/N 1A2114B) **should be maintained,** since the **new** VMC can be used **only with new Baseblocks (1A2573D),** and the **old VMC** will **not fit** snugly in the new Baseblock slots. (See chart on reverse side.)

PART AVAILABILITY

The new VMC/Bellows Assembly is available from Material Services in Cambridge, MA. Order through normal sources.

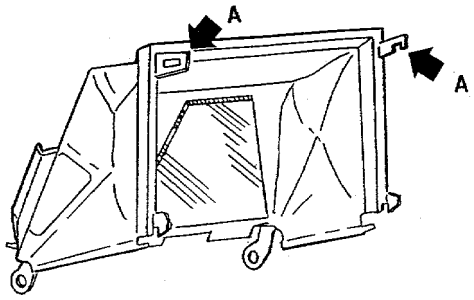

Fig. 1 New Joshua VMC/Bellows Assembly with thicker tabs "A"

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Old Baseblock		X	
New Baseblock	X		
New version of Baseblock			X
?	X	X	
Mfd. 7/94			X

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PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. JOSH 94-20
DATE: SEPT. 8, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: **IMPROVED SHUTTER DECORATIVE PLATE - JOSHUA CAMERAS**

BACKGROUND:

The shutter Decorative Plate on Joshua-series cameras has been redesigned to incorporate thicker, stronger mounting tabs. (See arrows in Figure 1, below.) This change was made to correct a problem of the tabs breaking and the resultant pieces being left inside the shutter assembly.

POLICY:

The new Decorative Plates will be phased-in at manufacturing facilities as inventories of the old plates are used up.

Existing Decorative Plates at repair facilities should continue to be used until repair inventories are depleted.

PARTS AVAILABILITY:

Refer to the Joshua/Joshua+ Parts Catalog for the proper part numbers to be used when ordering Decorative Plates. (Please note that the part numbers for the new Decorative Plates remain the same as the part numbers for the earlier Decorative Plates.)

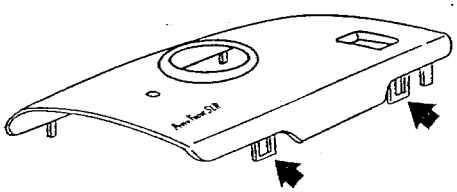

FIGURE 1 IMPROVED DECORATIVE PLATE WITH STRENGTHENED TABS

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PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 94-21
DATE: SEPT. 8, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____
QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: **VISION PICTURE REMOVAL DOOR FOR KOREAN MARKET**

To meet Korean government requirements, Vision cameras sold there must have the words "Made in the U.S.A." visible on an **external** surface of the camera. Accordingly, Korean-Market Vision cameras manufactured starting in March 1994, (PID# 618697) will have this statement engraved on the outside tab of the Picture Removal Door. (See Figure 1) The part number for the door is 1A2145B. Please note that the engraved doors are available for repair inventories only through special order.

This camera also has the strengthened Decorative Plate (1A2157K) described in Product Alert JOSH 94-20, dated August 17, 1994. In all other respects, the camera is the same as the latest Vision cameras made in 1994.

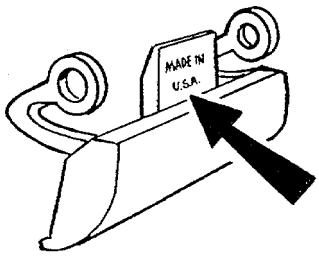


FIGURE 1 PICTURE REMOVAL DOOR FOR KOREAN-MARKET VISION CAMERAS

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. JOSH 95-22

DATE: FEBRUARY 22, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

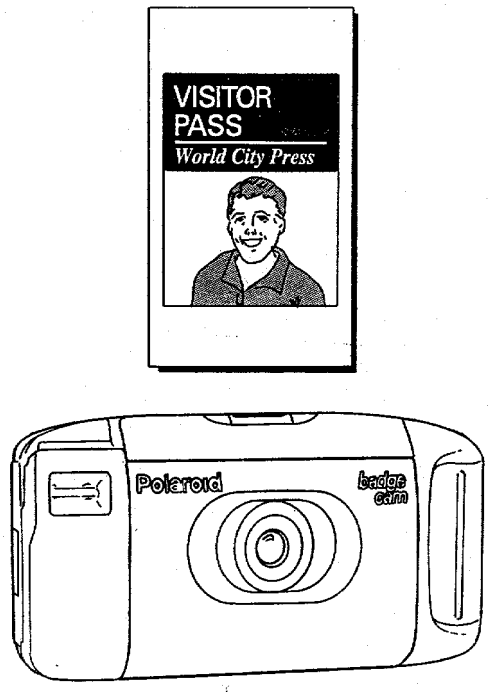
SUBJECT: WORLDWIDE INTRODUCTION OF BadgeCam AND BadgeCam Date CAMERAS

BACKGROUND

A unique new extension of the Joshua Camera design produces high-quality, attractive badges instantly, combining a portrait with custom-designed artwork.

The new **BadgeCam** (PID 619410) can produce temporary visitor passes, name badges for seminars, conferences and trade shows, IDs for short-term workers, and promotional souvenirs at theme parks, concerts and public events.

BadgeCam is easy to use, produces up to 200 ready-to-use badges/hour (no die cutting or laminating needed) and uses standard Polaroid 95 Film. The special **BadgeCam Date** model (PID # 619411) imprints a settable date stamp on each badge.



New BadgeCam Camera makes attractive, instant badges on Polaroid 95 Film.

BADGECAM OPERATION

The BadgeCam produces an instant print containing both the subject's portrait and the elements of custom-designed artwork. It does this by exposing the portrait image onto the film through an acetate overlay, which contains the individual artwork (see Fig. 1A & 1B). The overlay can be placed in either the camera or in the film pack.
The portrait area of the badge may be at either the center, left or right side (see Fig. 2A & 2B). To be sure the camera is correctly aimed for the particular portrait position chosen, three framing ovals on the BadgeCam's special Taking Mirror Carrier appear in the Viewfinder (see Fig. 3). These oval-shaped outlines also guide the operator in obtaining correct head size in the portrait image.
In addition, the BadgeCam has a special Lens Assembly to provide optimal focus at 3.5 feet (1.1m), rather than the normal 5.3 feet (1.6m).

The BadgeCam's exposure values have been specially optimized for overlays made on the Kodak ColorEase (T.M.) Printer: Polaroid cannot assure equal print quality if other manufacturers' acetate overlays or printers are used.

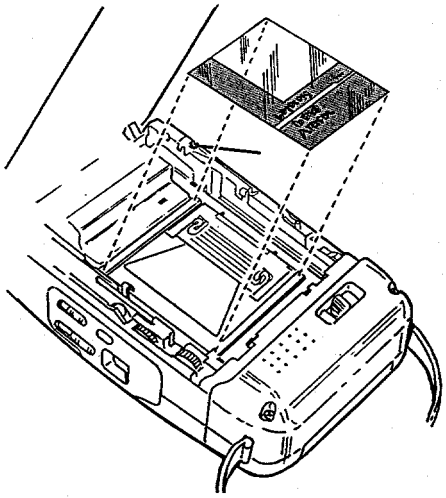


Fig. 1A Location of acetate overlay in BadgeCam Mainframe. Acetate is held in place with double-sided tape.

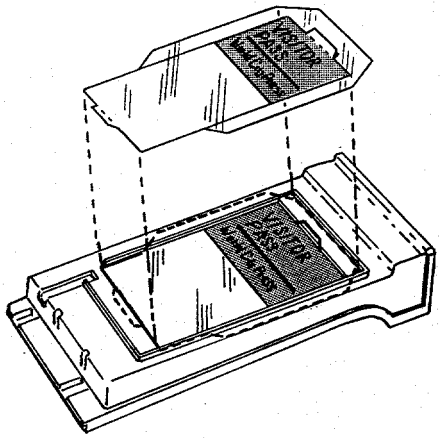


Fig. 1B Location of acetate in film pack. Wear white gloves when handling acetate overlays.

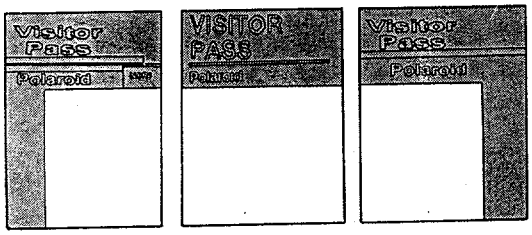


Fig. 2A In-camera acetates for left, center & right portraits.

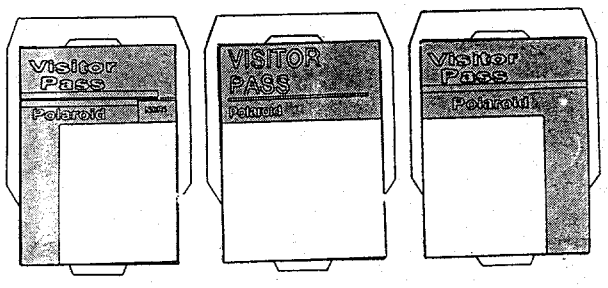


Fig. 2B Film Pack acetates for left, center & right portraits.

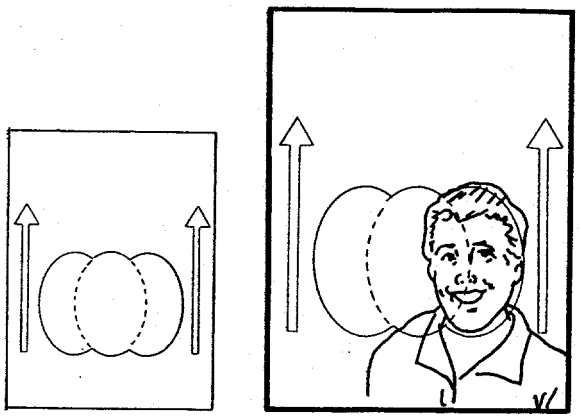


Fig. 3 Unique TMC (Taking Mirror Carrier) framing ovals help position and correctly size subject's head at left, center or right

BADGECAM UNIQUE PARTS

The BadgeCam Shutter Assembly differs from the standard Captiva Shutter Assembly in the following ways:

- Sol 2, Far Focus Lens, Latch Return Spring Latch Actuator, Lens Latch and one screw are not present.
- Special Lens Assembly provides optimal focus at 3.5 feet (1.1m)
- Shutter Decorative Plate and Top Cover are imprinted **BadgeCam** or **BadgeCam Date**
- Special Taking Mirror Carrier (TMC) Assembly incorporates three oval-shaped subject framing guides

Part Name	BadgeCam Part	BadgeCam Date Part
Lens Assembly (3.5'/1.1m focus)	1A2976B	1A2976B
Taking Mirror Carrier Assy	1A2110C	1A2110C
Shutter Decorative Plate	1A2157L	1A2157M
Top Cover	1A2933K	1A2933L
Baseblock Assy	1A2573E	1A2573E

A limited supply of the unique BadgeCam and BadgeCam Date parts listed above will available from Material Services in Bedford, MA.

CONFIGURATION

Configuration letter "F" (10th character of serial number) will be used to identify the BadgeCam and BadgeCam Date Camera models.

CAMERA WARRANTY

BadgeCam Cameras are warranted for five years from purchase date. BadgeCam Date Cameras have a lifetime warranty. (NOTE: These Warranty periods may differ in certain countries.)

ACETATE OVERLAY WARRANTY

Acetates overlays which are installed in the Camera Mainframe (as contrasted with acetate overlays in film packs) are warranted by the distributor who supplies them (not by Polaroid) for five years from date of camera purchase.

SERVICE

BadgeCam Cameras will be serviced at regional centers in Atlanta, Enschede, NPKK, etc.

At the present time, the acetate overlays are being supplied by authorized dealers, not by Polaroid. Consequently, if the customer experiences a problem with the acetate overlay, he should be directed back to the dealer who supplied the acetate.

Customers with BadgeCams carrying an acetate overlay installed in the camera will be asked to return a defective unit to the special network dealer from whom the camera was purchased. The acetate should be removed by the dealer, who will then send the camera (minus the acetate) to the appropriate Center or Subsidiary for service.

If the acetate overlay is in the film pack and it appears that the problem is in the camera, the customer should remove the acetate from the film pack and return the camera to a Service Center or to a local subsidiary.
No special test equipment is required for BadgeCam servicing, but special Star Tester or B Tester exposure values should be used:

Strobe Exposure at 4.5 feet: 0.497 ± 0.25 STOP

Ambient Exposure at 100 candles/ft^2: 0.371 ± 0.25 STOP

NOTE: Tests should be done without acetate in Camera.

No early returns program for BadgeCam is planned.

TRAINING

Self-training packages will be supplied to all service centers, consisting of BadgeCam descriptive literature, unique parts information and a BadgeCam familiarization videotape.

POLAROID CORPORATION

Customer Service Support
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. Josh #95-23
DATE: April 15, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: R. BATTLE/D. BILLINGSLEY

SUBJECT: ANALYZING BLACK BAR PROBLEMS IN JOSHUA PRINTS

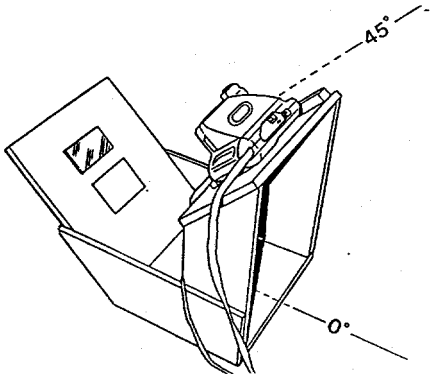
"Black Bar" problems in Joshua prints have been traced to a variety of causes, including the presense of foreign material in the camera (e.g., adhesives), as well as distortion and binding associated with the Taking Mirror Carrier (TMC), Viewing Mirror Carrier (VMC), Bellows, Baffle, Recock Link, or Mainframe parts.

To help isolate the cause, a procedure for systematic analysis and remedial action is attached to this Product Alert. Illustrated below is the camera mounted on a test fixture (Joshua Sled P/N 1360) required to complete the procedure, and samples of "Black Bar" prints.

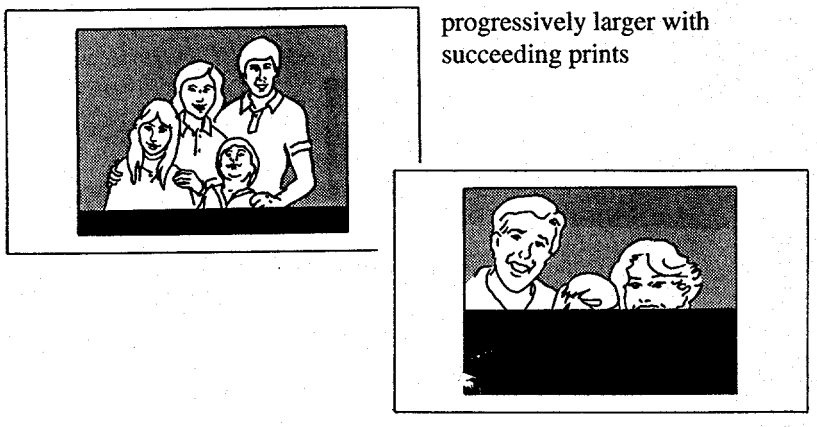
You may wish to review the videotape "TMC Troubleshooting Guide" recently sent to key repair facilities. This videotape is available from:

Polaroid Camera Products Services
Technical Service Department (Bed 1A-2)
201 Burlington Road
Bedford, MA 01730

When ordering, please refer to Product Alert Josh # 95-23 dated April 15, 1995 and the videotape



Joshua Camera Mounted on Sled



Typical Black Bar Prints

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. JOSH 95-24

DATE: APRIL 20, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: RUSSELL D. BATTLE

SUBJECT: TROUBLESHOOTING MIRROR TRAVEL PROBLEMS IN JOSHUA TMC (TAKING MIRROR CARRIER)

BACKGROUND

A number of telltale signs of mirror travel obstruction in the Joshua-series cameras TMC (Taking Mirror Carrier) have now been identified and effective solutions developed to correct them.

Attached to this Product Alert is a list of common symptoms, common causes and troubleshooting procedures for TMC travel problems.

Please note that this information should be used in conjunction with the recently-released videotape, “T.M.C. Troubleshooting Guide”, which was sent to certain key repair facilities.

A copy of this Videotape is available from Camera Products Services, Technical Services Dept., 1A2, 201 Burlington Road, Bedford, MA 01730. When ordering, please refer to this Product Alert (JOSH 95- dated 3/17/95), and the videotape name “T.M.C. Troubleshooting Guide.”

IDENTIFYING AND CORRECTING MIRROR TRAVEL PROBLEMS

IN THE JOSHUA TAKING MIRROR CARRIER (TMC)

Common symptoms of Mirror travel problems:

Black bar — Baffle is visible in picture

Light leak — high light leak readings at the Light Leak Station may indicate Mirror travel obstruction.

Abnormal Exposure Readings — excessively low or an erratic range of exposure readings at Exposure Tester may indicate Mirror travel obstruction.

Common causes of Mirror travel obstruction:

Loose or broken material inside Viewfinder

Camera is not fully erected

Mirror Catcher is not seated

Shutter Actuator is malfunctioning

Inner Viewfinder Lens Retainer is not seated

Adhesives or broken material are obstructing the Recock link under the Drive Cover.

Clutch Gear is defective

Recock Post is broken on Mainframe

Adhesive present under TMC (Taking Mirror Carrier)

VMC/TMC is tight (VMC pivot tabs pressing excessively on TMC)

TMC pivot hole inner surface is damaged

Mirror Catcher is not seated on Mainframe

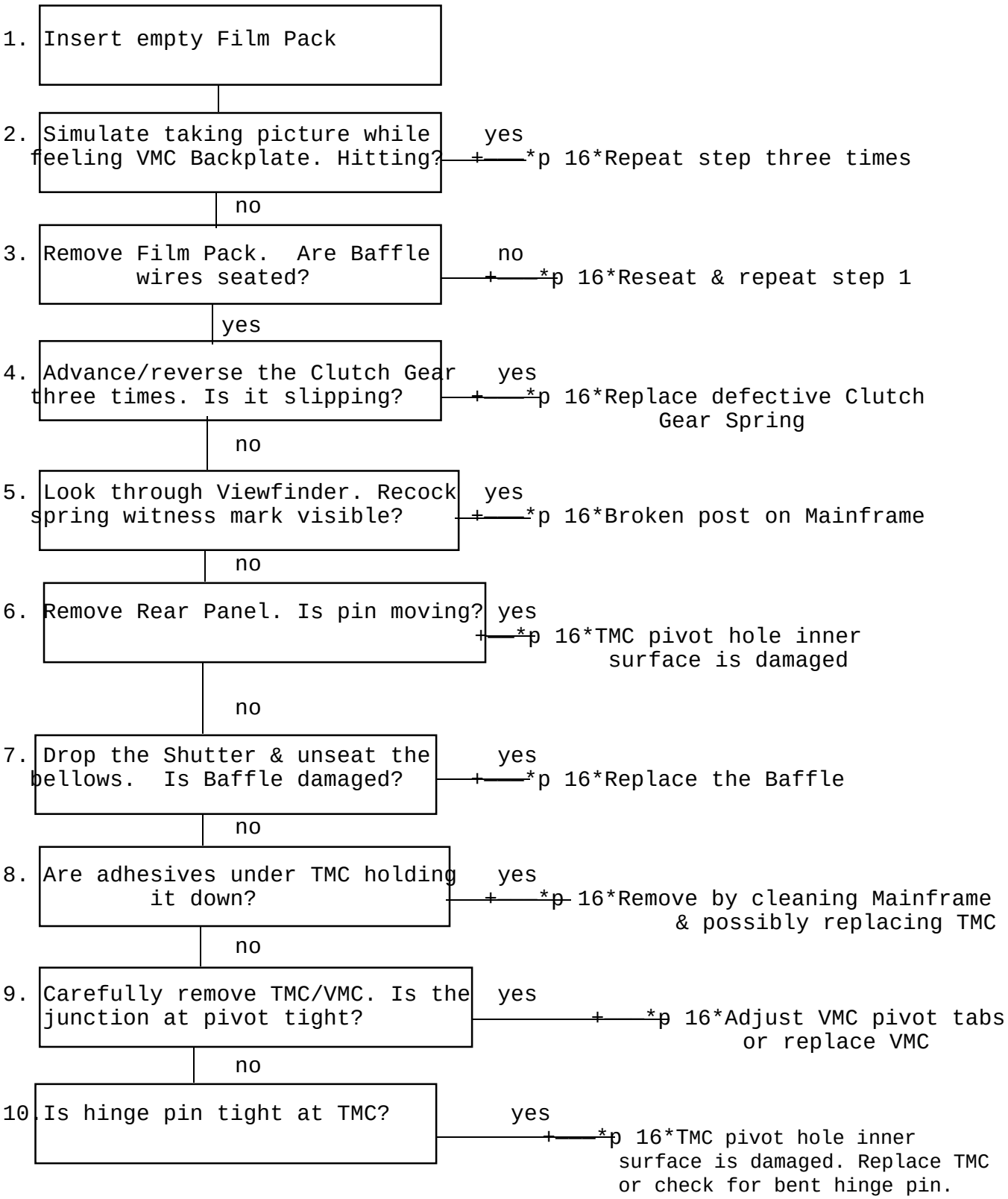
Actuator is not being operated by Shutter

Inner Viewfinder Lens is not seated in Mainframe

Glossary:

TMC Taking Mirror Carrier
VMC Viewing Mirror Carrier
MF Mainframe
ID Inside Diameter/Inner Surface (of a pivot hole)

MIRROR TRAVEL TROUBLESHOOTING FLOWCHART


1. Insert empty Film Pack
2. Simulate taking picture while feeling VMC Backplate. Hitting?
yes
*p 16*Repeat step three times
no
3. Remove Film Pack. Are Baffle wires seated?
no
*p 16*Reseat & repeat step 1
yes
4. Advance/reverse the Clutch Gear three times. Is it slipping?
yes
*p 16*Replace defective Clutch Gear Spring
no
5. Look through Viewfinder. Recock spring witness mark visible?
yes
*p 16*Broken post on Mainframe
no
6. Remove Rear Panel. Is pin moving?
yes
*p 16*TMC pivot hole inner surface is damaged
no
7. Drop the Shutter & unseat the bellows. Is Baffle damaged?
yes
*p 16*Replace the Baffle
no
8. Are adhesives under TMC holding it down?
yes
*p 16*Remove by cleaning Mainframe & possibly replacing TMC
no
9. Carefully remove TMC/VMC. Is the junction at pivot tight?
yes
*p 16*Adjust VMC pivot tabs or replace VMC
no
10. Is hinge pin tight at TMC?
yes
*p 16*TMC pivot hole inner surface is damaged. Replace TMC or check for bent hinge pin.

TMC Taking Mirror Carrier **MF** Mainframe
VMC Viewing Mirror Carrier **ID** Pivot hole Inside Diameter/Inner Surface

POLAROID CORPORATION

Customer Service Support
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

REPAIR INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

RIB NO. JOSH # 95-25

DATE: NOVEMBER 21, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DWAYNE BILLINGSLEY

SUBJECT: RECOCK LINK SPRING POST REPAIR

Introduction:

There have been a number of reports of breaking recock link spring posts on the Vision/JoyCam/Captiva main frame. (See Figure 1) When the post breaks, the camera is rendered inoperative requiring a repair that consists of replacing the main frame. A repair part has been developed which allows the main frame to be repaired, rather than replaced.

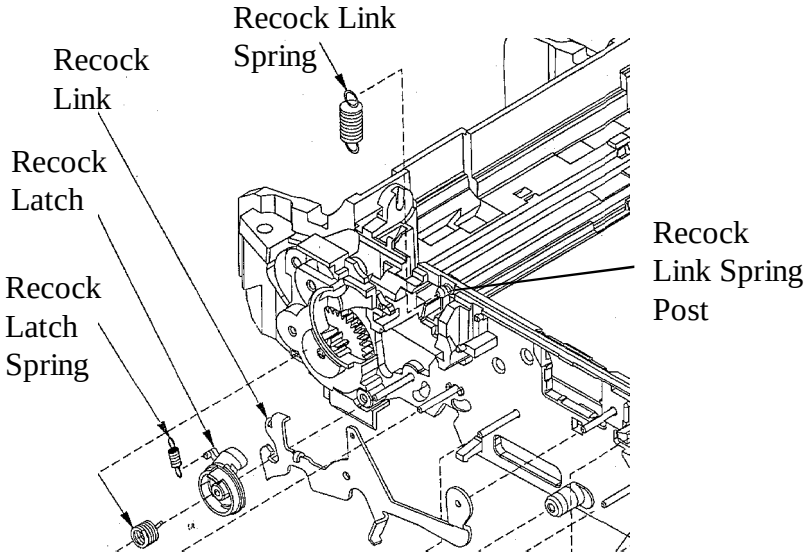


Figure 1 Affected Area of Main Frame

Repair Procedure:

NOTE: *If the post on the main frame has broken, there is a liklihood that the recock link spring has fallen into another part of the camera and caused more extensive damage. Examine the camera carefully and if additional damage is found, make an analysis to determine if the following procedure should be done or if the entire camera should be replaced.*

1. Remove the main frame from the camera and disassemble it to the point where the area of the broken post is accessible.

2. If necessary, file down the post area so the surface on the main frame is smooth.

3. As shown in Figure 2, orient the repair recock link spring hook #1A2678A over the wall of the main frame and insert it so the flat bottom portion rests in the main frame cavity and the upper hook portion is latched onto the wall. Figure 3 shows a correctly inserted repair recock link spring hook.

4. Reassemble the camera and cycle it a few times to verify proper operation.

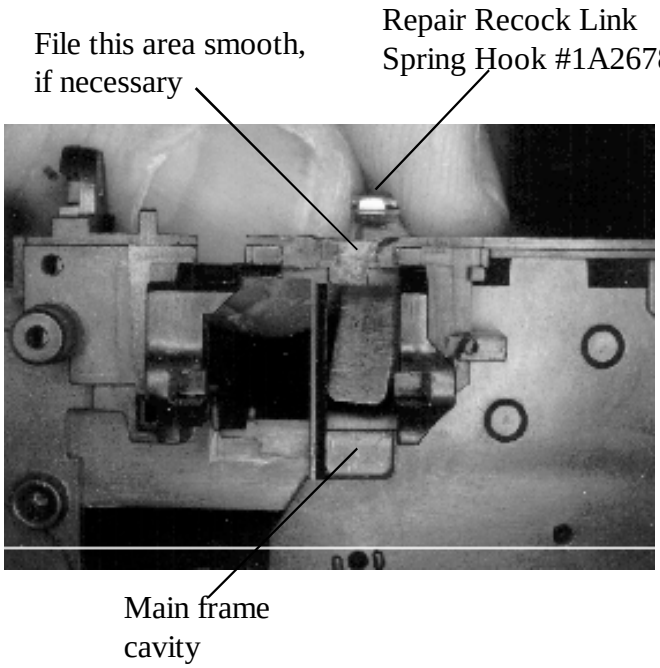


Figure 2

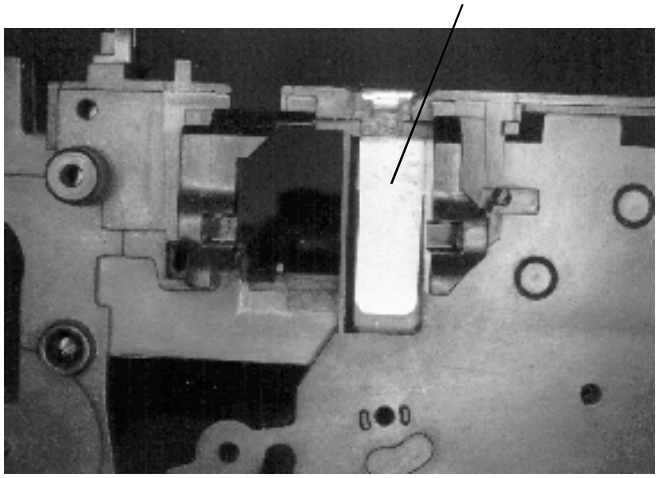


Figure 3

Parts Availability:

Repair recock link spring hook # 1A2678A will be available from Material Services in Bedford Massachusetts after . Please order from normal sources

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. GEN #94-4
DATE: JUNE 27, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: SUSPECT AD-90 MINIROLLERS #1B8281A (PID #618492)

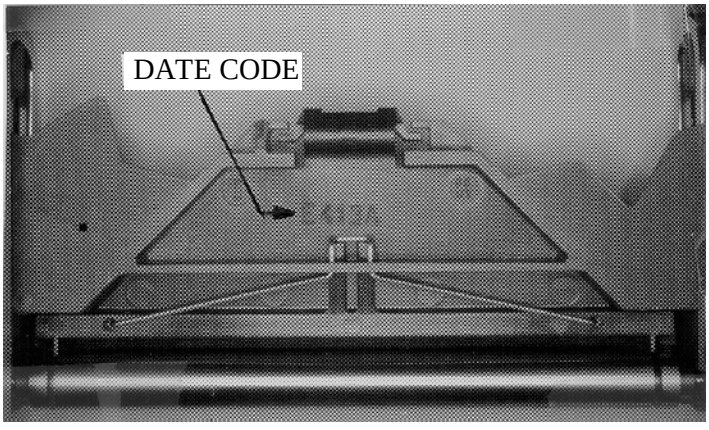
BACKGROUND:

Reports of film spread problems have been traced to AD-90 minirollers with date codes of E412A and E413A. (Figure 1) The problem, which is not customer-correctable, is evidenced as incomplete coverage.

CORRECTIVE ACTION:

Customers who complain of incomplete coverage problems, should be asked to remove and examine the AD-90 minirollers. If the date code is either E412A or E413A, the customer should be told to stop using the minirollers and a new set of minirollers should be sent at no charge. (This assumes that the minirollers have been properly cleaned and that debris could not be causing the incomplete spread.)

Please note that not all minirollers with these date codes are defective. Minirollers with these date codes should be replaced only if these has been a complaint of incomplete coverage.



LOCATED ON SIDE OF PLATFORM OPPOSITE "POLAROID" IMPRINT

FIGURE 1 LOCATION 0F DATE CODE ON AD-90 MINIROLLERS

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. 545 #95-31
DATE: April 20, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

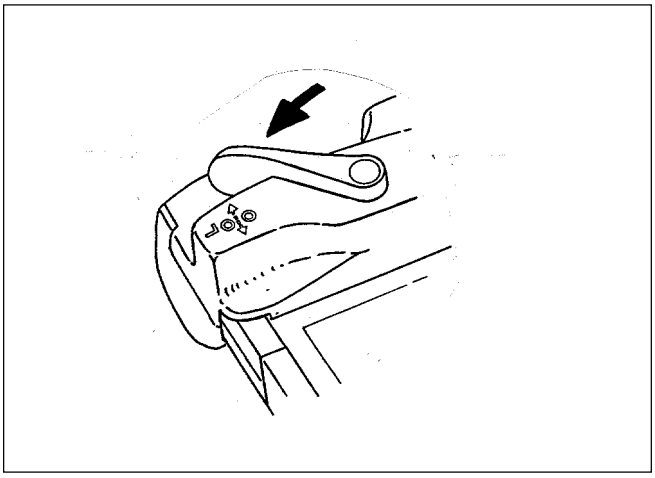
SUBJECT: REMOVING TRAPPED END CAPS IN 545i FILMHOLDER

BACKGROUND:

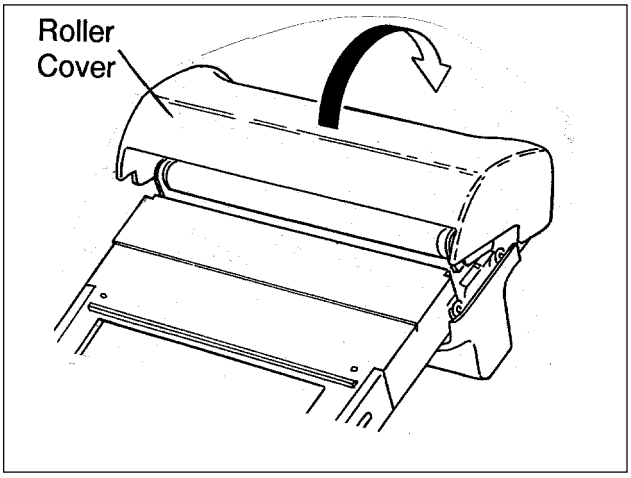
There have been a number of 545i Filmholders returned for repair with complaints of end caps being trapped inside. The removal of end caps from this filmholder is a simple procedure, which customers can easily be taught to do. When you return a filmholder after removing the end cap, insert the accompanying procedure with the unit.

TO REMOVE A FILM END CAP FROM A 545i FILMHOLDER:

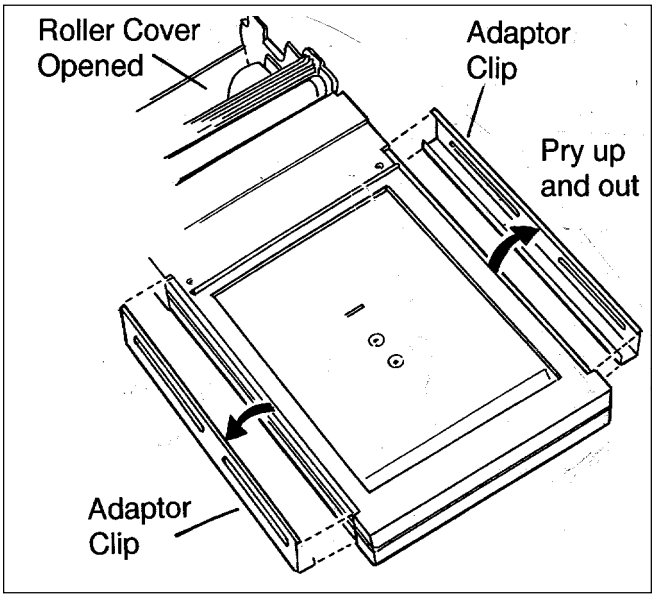
1. Turn the selector lever to "L" (load).



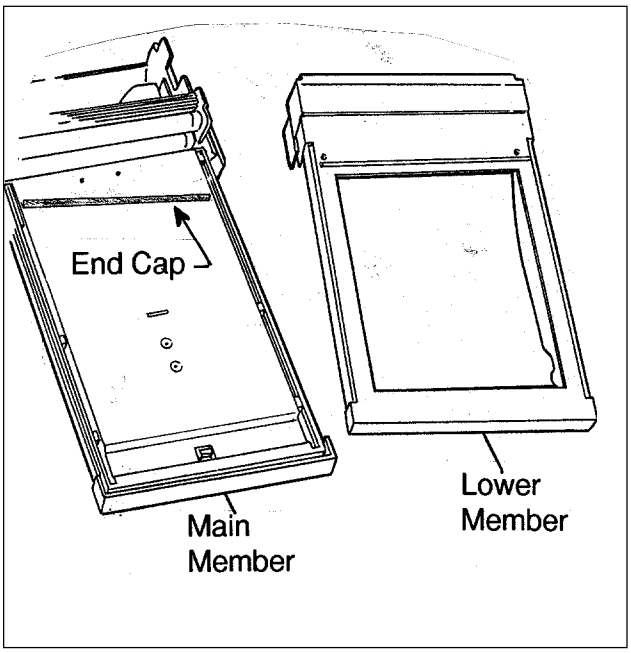
2. Open the roller cover.



3. Lay the filmholder flat and grasp under one of the adaptor clips with the tips of your fingers. Firmly pull the clip upward to free it from the lower member. If necessary, pry the clip off the lower member using a tool which will not mar the finish of the unit. (A soldering aide is ideal for this purpose.) Remove the second adaptor clip in the same manner.



4. Lift the lower member off the main member and remove the end clip.



5. Orient the lower member over the main member and secure the two assemblies by snapping the adaptor clips in place. Note that the top of the adaptor clip is narrower than the base. The base fits under the main member while the top snaps over the lower member.

6. Close the roller cover and check the operation of the filmholder. If the filmholder does not work properly, be certain that you have assembled the unit properly. If you cannot get the unit to work properly, return it to the nearest Polaroid Authorized Repair Facility.

Roller
Cover

Adaptor
Clip

Adaptor
Clip

Lower
Member

Main
Member

Roller
Cover

Adaptor
Clip

Adaptor
Clip

Lower
Member

Main
Member

Pry up
and out

Pry up
and out

Roller Cover
Opened

End Cap

End Cap

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. 545 #95-32

DATE: SEPT 25, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: LOWER MEMBER REWORK FOR COMPATIBILITY WITH WISTA & LINKHOF TECHNIKA CAMERAS

BACKGROUND:

Manufacturing at the Vale of Leven in Scotland has initiated a rework on the Lower Member of 545i Filmholders. The purpose of the rework is to make the 545i compatible with Wista and Linkhof Technika cameras. As seen on the attached Deviation Notice, the 5.776" dimension of the Lower Member has been changed to 6.00".

IDENTIFICATION:

As a result of this modification, the part number of the Lower Member changes from 1D1059A to 1D1059B. Additionally, the configuration code of 545i Filmholders made with the modified Lower Member has changed from "B" to "C" and, starting with lot #021, master shipping cartons and individual shipping cartons containing the modified Filmholder carry a date code of "H4".

-over-

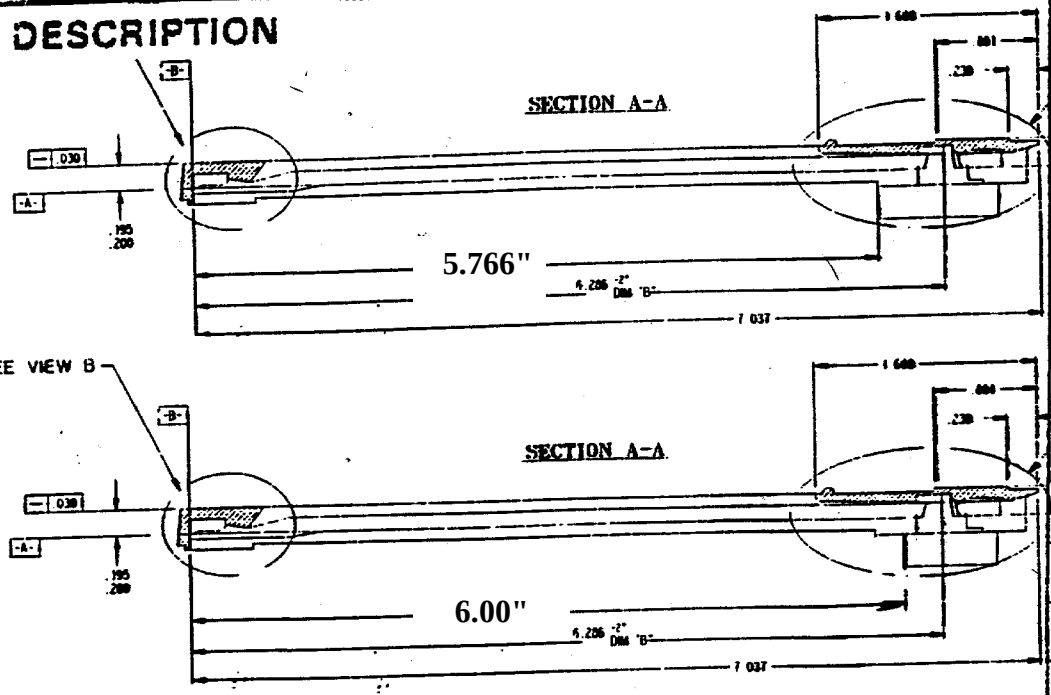
DEVIATION NOTICE

PRODUCT	545i FILM HOLDER
SPEC./DWG. TITLE	LOWER MEMBER
SPEC. NO./DWG. NO.	1D1059A

DEV. NO.* V1524

REQUESTING DEPT	DATE INITIATED
St.Albans/NPKK	13.05.94
INITIATING ENGR.	**DATE APPROVED**
F. Sadler	06.06.94

DESCRIPTION



* 5.776" DIMENSION MAY BE MODIFIED TO 6.00" AS ABOVE

REASON

MODIFICATION TO ELIMINATE INTERFERENCE WITH THE WISTA AND LINHOF TECHNIKA CAMERAS.

SUPPORT REFERENCES

MEMO DATED JUNE 6TH, 1994 FROM PAUL CAMELLO TO PAUL TRUMBOUR ON SUBJECT "545i" LOWER MEMBER LINKAGE COVER CHANGE.

APPROVAL

PROJ. ENGR
MFG. ENGRG.
PROG./PROJ. MGR
PROD. DES. ENGRG
ELEC DEPT.
SUPV DRAFTING
DIR. SYS. ENGRG
CORP Q. A.
ENG Q. & R
MFG. Q.C.
MGR PKG. ENGRG.
INTERNATIONAL MFG.

QUANTITY 8,0C

EXP. DATE Jan

QUANTITY

EXP. DATE

TYPE I TEMPORARY
DEVIATION IS TEMPORARY AND VALID ONLY FOR THE QUANTITY AND TIME SPECIFIED. TYPE I DEVIATION DOES NOT APPEAR ON DRAWING.

TYPE II FOR LIFE OF TOOL
DEVIATION IS FOR THE QUANTITY AND TIME SPECIFIED AND A COPY OF APPROVED DEVIATION MUST BE FORWARDED TO ENGINEERING CHANGE SUPERVISOR. DEVIATION WILL BE INDICATED ON THE DRAWING FOLLOWING STANDARD DEVIATION NOTICE PROCEDURES. THE SIGNATURES LISTED ABOVE APPROVE THE E.C.N. COVERING DRAWING CHANGE AND DISTRIBUTION.

EXTENSIONS

AFFECTS/YES/NO	
U.S.A	YES
U.K.	YES
ENSCHEDE	YES
OTHER	YES

EMERGENCY APPROVAL

BY _____

DATE _____ ECC

DEVIATION RELEASE NUMBERS WILL BE ASSIGNED BY PRODUCT DESIGN DRAFTING

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. LCD 94-1

DATE: JU;Y 11. 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

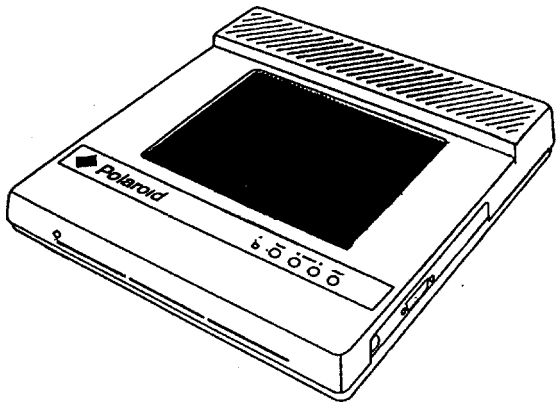
TO: LIST

FROM: NICK CURRERI

SUBJECT: INTRODUCTION OF POLAROID LCD PANELS

Introduction

Three LCD Panel Overhead Projection systems (Polaview 1500, 1800, and 3000) have been recently introduced by Polaroid. Each LCD panel is designed to convert an overhead projector into a computer output device.



The Polaview LCD panels are compatible with most PC's (Apple Macintosh and IBM compatibles) and will display resolutions up to 640 x 480.

The Polaview 1500 uses Film Super Twist Nematic (FSTN) technology which is referred to as a passive matrix. This panel is the least expensive of the three panels.

The Polaview 1800 and 3000 use Thin Film Transistor (TFT) technology which is referred to as an active matrix. The TFT type has a brighter and higher contrast than the FSTN type.

Refer to the Comparison Chart at the end of this New Product Alert for specific information pertaining to the features of the new LCD panels (Polaview 1500, 1800, and 3000) and the existing DP2000 LCD panel.

Availability

The Polaview LCD Panels (1500, 1800, and 3000) will be available for sale during the second quarter of 1994.

Service Policy

U.S.

The Polaview User Manual instructs the customer to call Polaroid Technical Assistance Hotline (1 800 225 1618, Mon - Fri. 8AM - 8PM EST). A Technical Assistance Representative, in turn, will advise and assist the Customer. If the Technical Representative determines that remedial phone actions cannot resolve the situation, the Customer will be instructed to return the defective Polaview prepaid and insured in the original or comparable packaging to:

Polaroid
784 Memorial Drive
Cambridge, Ma. 02139
Attn: IndustriaI Repair

The Polaview will be repaired or exchanged and then returned to the Customer within 5 working days after the receipt of the defective unit by Polaroid.

International

If outside the U.S., Customers must contact the nearest Polaroid Office (addresses are in the rear of the User Manual).

Early Return Program

To provide Polaroid with early information on Customer acceptance and performance of the Polaview, an Early Returns Program is being implemented.

Under this program, all defective Polaviews will be initially analyzed against performance standards, estimated failure rates, and estimated reliability standards in an attempt to: isolate deviations; address comments and questions from Customers; and to recommend solutions. Reports highlighting Early Return findings and information will be issued.

Warranty Policy

All LCD Panels are warranted for one year from the date of purchase.

OutofWarranty Policy

The procedures will be the same as they are for warranty repairs, except the Customer will be charged for work performed, parts, and labor.

Parts/Documentation

Parts and Documentation for the LCD Panels will be available as follows:

	DP1500	**DP1800/3000**
Parts Catalog	7/1/94	7/1/94
Parts Availability	8/15/94	7/1/94
Service Manual	7/1/94	7/1/94

Training

Service Centers will be provided with a Service Manual and a Parts Catalog. Training will be provided if necessary.

Polaroid LCD Panels

Polaroid LCD Panels Feature Comparison Chart	**PolaView 1500**	**PolaView 1800**	**DP 2000**	**PolaView 3000**
LCD Type	DualScan Passive	Active Matrix TFT	Active Matrix TFT	Active Matrix TFT
LCD Size (ding)	8.4 inches	8.4 inches	10.4 inches	8.4 inches
LCD Resolution	640x480	640x480	640x480	640x480
Max.lnput Resolution	800x600	800x600	640x480	800x600
Max.Color Capability	256,000	2.1 million	16.7 million	16.7 million
Contrast Ratio	20:1	100:1	100:1	100:1
Response Time	100 ms.	30 ms.	30 ms.	30 ms.
Direct Video Input	No	No (opt)	No (opt)	Yes
Amplifier & Speaker	No	No	No	Yes
Infrared Remote Control	Yes	Yes	No	Yes
Mouse Emulation	Yes	No	No	Yes
Hard Attache Case	Yes	Yes	Yes	Yes
Dimensions	12.2x1 2.2x1 .57 in.	12.2x1 2.2x1.57 in.	12.2x12.2x1.75 in	12.2x12.2x1.57 in.
Weight	4.7 lb.	5.5. lb. 4.7 lb.	4.7 lb	4.7 lb.
SVGA	Yes	Yes	No	Yes
VGA	Yes	Yes	Yes	Yes
EGA	Yes (opt.cable)	Yes (opt.cable)	Yes (opt. cable)	Yes (opt.cable)
CGA	Yes (opt.cable)	Yes (opt.cable)	Yes (opt. cable)	Yes (opt cable)
MAC 11	Yes	Yes	Yes	Yes
MAC ILC	Yes	Yes	Yes	Yes
Quadra	Yes	Yes	Yes	Yes
Centris	Yes	Yes	Yes	Yes
Power Book	Yes	Yes	Yes	Yes
Suggested Retail	$3495.00 The latest "dualscan" passive color LCD technology, remote mouse emulation right on the remote control.	$4995.00 Displays 2 1 million colors from SVGA,VGA, or Macintosh computers. High contrast, fast response time,easy to use,low weight and small size makes it a a very portable LCD panel.	$5995.00 World's first panel capable of accurately interpreting and displaying all 16.7 million colors from a 24bit computer video sources	$6695.00 A"real" Multimedia LCD panel with true color, onboard amp. and speaker, direct video inputs, microphone, timer and mouse emulation included on the remote control.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. LCD #95-2
DATE: December 13, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____
QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **List**

FROM: **Arvin M. Arvind**

SUBJECT: **NEW POLAVIEW LCD PROJECTORS**

Polaview LCD Projector

INTRODUCTION:

Starting in the 3rd Quarter of 1995, five desktop Polaview LCD Projectors will be available from Polaroid. They are:

MODEL	PID Number
Polaview Model 105 LCD Projector	620222
Polaview Model 95 LCD Projector	620220
Polaview Model 90 LCD Projector	620218
Polaview Model 85E LCD Projector	620495
Polaview Model 80 LCD Projector	620216

The Polaview LCD projectors are completely self-contained personal computer peripherals which project computer and video images onto a large screen for audience viewing. They use an active matrix LCD for sharp, crisp projected images and are the brightest desktop projectors in the market-place today.

The Polaview LCD projectors display resolutions up to 640 x 480 and are compatible with most computers (including Apple Macintosh and IBM compatibles) .

PRODUCT LINE DESCRIPTION:

Key features of two of the Polaview LCD Projectors are summarized below as examples of features of all:

Polaview 105 LCD Projector:

- Advanced polysilicon LCD delivers brilliant images in any lighting conditions. 300 ANSI lumens and advanced optics project bright saturated colors.
- Easy remote control of image size (1 to 1.6 diagonal size) and focus vida power zoom lens
- Projects 16.7 million brilliant colors
- Directly compatibile with your personal computer
- Easy set-up
- Low profile, compact housing
- Lightweight (23 lbs or 10.5 Kg), sturdy design for portability
- Integrated video and audio support (with speakers)

Polaview 95 LCD Projector:

- 500 ANSI lumens create bright, colorful images on-screen in well-lit rooms; projects 2 million colors from a palette of 16.7 million
- Metal halide lamp illuminates bright projected images
- Active matrix LCD for sharp, crisp images
- Low profile, compact design
- Light weight and sturdy for portability

SERVICE POLICY:

U.S.

If a customer has a problem with the LCD Projector, the User Manual instructs him/her to call the Polaroid Technical Assistance Hotline (1-800-432-5355, Mon.- Fri, 8AM to 8PM EST). If the Technical Assistance Representative determines remedial actions over the phone cannot resolve the situation, the Customer will be instructed to return the defective LCD projector prepaid and insured in the original or comparable packaging to:

Polaroid EIS Tech Support Division
6755 Mira Mesa Blvd
Suite 123-315
San Diego, CA 92121-4311

and to mark the outside of the shipping box with the Return Authjorization (RA) number (this will speed up the processing of their repair)

Non-US:

Customers outside the United States must contact the nearest Polaroid Office (addresses are in the LCD Projector User's Manual).

EARLY RETURNS PROGRAM:

There is no early returns program for the LCD Projectors.

WARRANTY POLICY:

All LCD Projectors are warranted for one year from the date of purchase.

OUT-OF-WARRANTY POLICY

The procedures will be the same as they are for warranty repairs, except the customer will charged for work performed, parts, and labor.

PARTS/DOCUMENTATION:

Parts and Documentation for the LCD Projectors will be available as follows:

Parts Catalog	After October 1995
Parts Availabity	After October 1995
Service Manual	None

TRAINING:

Formal training will not be necessary, since Polaroid will not be repairing these products in the US. Service Centers will be provided with a Parts Catalog.

POLAROID CORPORATION
Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFO

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

N.P.I. NO. **PD #94-1**
DATE: **SEPT. 22, 1994**

TECH. SERVICES: **MAT'L SERVICES:**
QUAL. CONTROL: **OPERATIONS:**

TO: LIST

FROM: BILL BOBROWSKI

SUBJECT: INTRODUCTION OF THE POLAROID PICTUREDRIVE LINE

BACKGROUND:

Polaroid is introducing a new line of removable computer hard disk drives which are intended primarily for users with high memory storage needs. These include graphic designers, desktop publishers, imaging and multi-media experts. There are three drives in the line and they are called;

PictureDrive 270 - can read and write 3.5" cartridges in 270MB and 105MB formats
PictureDrive 200 - can read and write 5.25" cartridges in 200MB, 88MB, and 44MB formats
PictureDrive 88 - can read and write 5.25" cartridges in 88MB and 44MB formats

Each PictureDrive is based upon proven Winchester drive mechanism technology and each uses fast, reliable SyQuest cartridges. Each drive also features automatic error detection/correction and extensive defect management. The PictureDrive 270, typical of all three drives, is shown in Figure 1.

Figure 1 Picture Drive 270 with SyQuest Cartridges

DESCRIPTION:

Each of the PictureDrives has a SCSI II interface to provide fast access times. In fact, the PictureDrives are described as the only secondary storage drives which are fast enough to be primary drives. They have burst data transfer rates of up to 5MB per second.

Among the other features of these drives are:

- the drive heads never come in contact with the disk surface
- on-the-fly error correction
- all of the benefits of removable storage including
  - unlimited capacity
  - off-line storage
  - data transportability
  - data security
  - fast backups

SPECIFICATIONS:

PictureDrive 270

Interface:	SCSI II
Capacity:	256MB or 105MB formatted minimum
Performance:	
average seek time	13.5 msec
average latency	8.33 msec
sustained data transfer rate	2.4 MB per sec
buffer size	128K
Reliability:	
non-recoverable data errors	1 in 10^{12} bits
MTBF	100,000 hours power on time
cartridge insertions	20,000 cycles minimum
component design life	5 years

PictureDrive 200

Interface:	SCSI II
Capacity:	200MB, 88.8MB, or 44.39MB formatted minimum
Performance:	
average seek time	18.0 msec (200MB cartridge)
average latency	9.32 msec
sustained data transfer rate	2.0 MB per sec (200MB cartridge)
buffer size	64K
Reliability:	
non-recoverable data errors	1 in 10^{12} bits
MTBF	100,000 hours power on time
cartridge insertions	20,000 cycles minimum
component design life	5 years

SPECIFICATIONS (Continued)

PictureDrive 88

Interface: SCSI II
Capacity: 88.8MB or 44.39MB formatted minimum
Performance:

average seek time	20 msec (88MB cartridge)
average latency	9.32 msec
buffer size	32K

Reliability:

non-recoverable data errors	1 in 10^{12} bits
MTBF	100,000 hours power on time
cartridge insertions	20,000 cycles minimum
component design life	5 years

WARRANTY:

Each PictureDrive has a two year warranty. The cartridges carry a five year warranty.

SCHEDULE:

PictureDrives have been available in Japan since June of 1993. They were introduced in the USA at MacWorld in Boston in August, 1994. It is expected that shipments will begin in late September, 1994. The current plan is to have units available only through Macwarehouse until some pending issues are resolved.

EARLY RETURNS PLAN:

An Early Returns Plan will be set up with all customer returns/failures forwarded to Cambridge. An analysis team will be established to examine each return with the intent of providing early market feed-back information to the factory. Once sufficient data has been collected, all returns will be sent to Oak Brook.

SERVICE PLAN/PARTS AVAILABILITY:

Current plans call for all failed/returned units to be sent to Oak Brook for functionality testing only. Once testing is completed, units will be forwarded to SyQuest for repairs. Polaroid will not stock repair parts.

PRICING:

PictureDrive	***PID #***	***Sugg. List***	***Cartridges***	***PID#***	***Sugg. List***
270	618932	$649.00	3.5" 270MB	618933	$ 99.00
			3.5" 105MB	618970	$ 69.00
200	TBD	$669.00	5.25" 200MB	TBD	$109.00
88	618726	$499.00	5.25" 88MB	618728	$109.00
			5.25" 44MB	618727	$ 79.00

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

REPAIR INFO BULLETIN

Int'l ☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. 35mmScan #94-1
DATE: November 28, 1994

CPS
TECH. SERVICES: _____
QUAL. CONTROL: _____
OPERATIONS: _____
MATERIAL SVCS: _____

MANUFACTURING
QUALITY: _____
MFG. ENG. _____
DESIGN ENG: _____

TO: LIST

FROM: JIM FEE

SUBJECT: ELECTRONICS CHANGE IN 35MM SCANNER CONTROLLER BOARDS TO ELIMINATE LOW LEVEL NOISE

BACKGROUND:

Engineering has authorized a running change in 35mm Scanner Controller Boards #1E6535A. The purpose of the change is to address customer complaints regarding low level noise seen in the dark portions of some images. The change involves the installation of a new diode on the board.

ACTION:

If you receive a customer complaint which leads you to believe that a low level noise problem is the cause, examine the controller board to determine whether new diode D3 has been installed. If it has not, install the diode according to the procedure which follows:

Part Required:

One National 1N914 or 1N4148 diode or equivalent

Procedure:

1. Locate microprocessor U14 on the controller board (see Figure 1).

2. Using an X-acto knife, cut the traces from VDD to Pins 10 and 11 of U14 (see Figure 2).

3. Bend the legs of the new diode to allow the anode leg to be soldered to pin 1 of R58 and the cathode leg to be soldered across pins 10 and 11 of U14 (see Figure 3).

   NOTE: For Controller Boards 1E1193A, the reference designation of the resistor noted in the previous step is R59.

4. Assemble the unit and run it through a couple of cycles to verify proper operation.

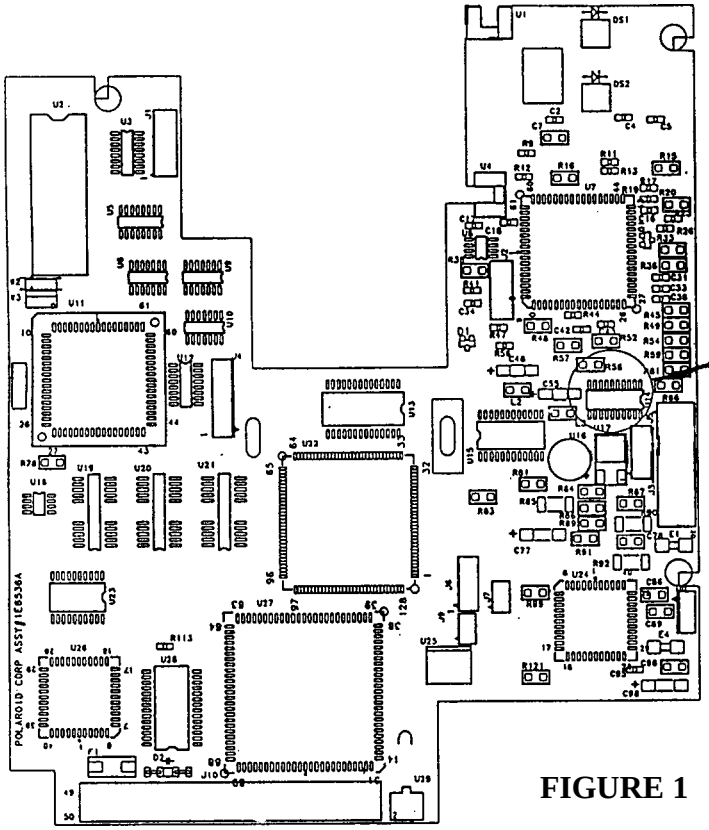


FIGURE 1

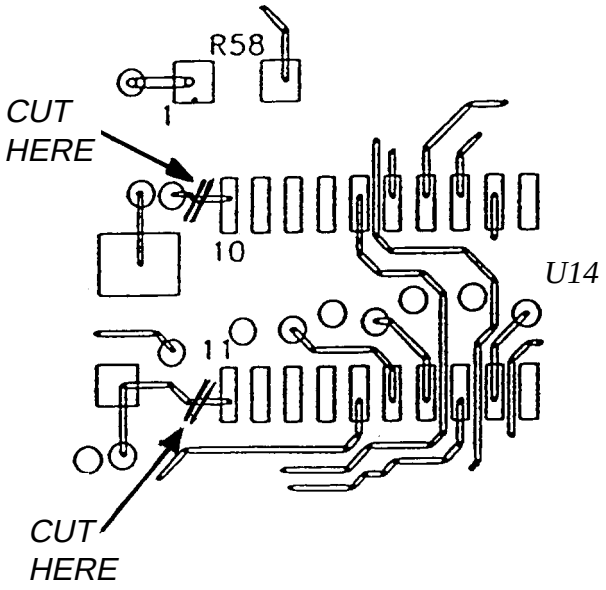


FIGURE 2

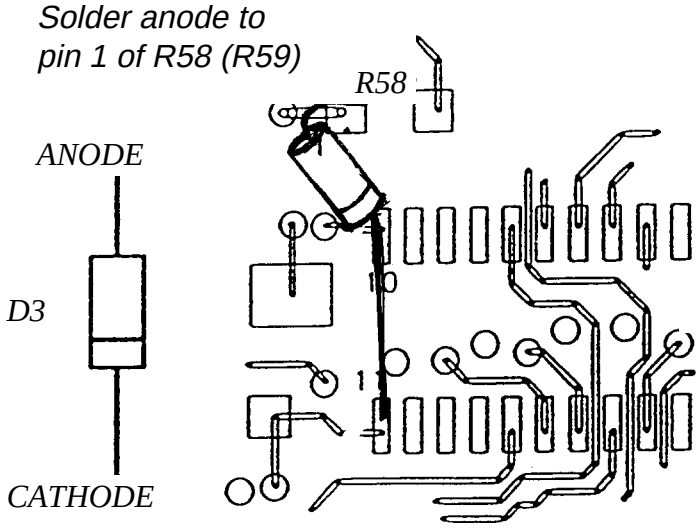


FIGURE 3

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. 35mm Scan # 95-2

DATE: June, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: JIM FEE

SUBJECT: SPRINTSCAN 35 CONFIGURATION CHANGES

The SprintScan 35 Scanner was produced in one configuration with no suffix at the end of its serial number (H400235). However, continuous improvements to the scanner lead to design Configuration " C ".

At present there are now four SprintScan 35 Scanner configurations. Their differences are shown in Table 1.

Table 1. SprintScan 35 Scanner Configurations

Configuration	Serial Number	Description	Function
No Suffix - First generation	**H400235**	N/A	N/A
A	**L400500A**	Filter Wheel Changed.	Changes filter wheel neutral density from 0.5 to 0.6 and ensures scanning uniformity with all color channels.
B	**M40033B**	Controller PC Board Modified.	Reduces noise to prevent vertical\diagonal lines.
C	**C5001762C**	Adds slot cover to chassis assembly.	Inhibits filter wheel from over rotating and getting lost, stuck, or jammed.

Note: The first Configuration " C " unit will be manufactured with the serial number **C5001762C**. This configuration also includes the changes made to configurations " A " and " B ".

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

Configuration Identification

Location

The Serial Number (Figure 1) is located:

- On the outside of the shipping carton (All Configurations)
- Back panel of the Scanner below its SCSI ports (First generation to Configuration " B ")
- Bottom of Scanner (Configuration " C " and all subsequent Configurations)

Identification

The Serial Number identifies the SprintScan 35mm Scanner as follows:

Month: A - January
B - February
C - March

Sequential Number

C 5 001762 C

Year: 4 - 1994
5 - 1995

Hardware Configuration Levels: A - Filter Wheel Changed
B - Controller PC Board Modified
C - Adds Slot Cover to Chassis Assembly

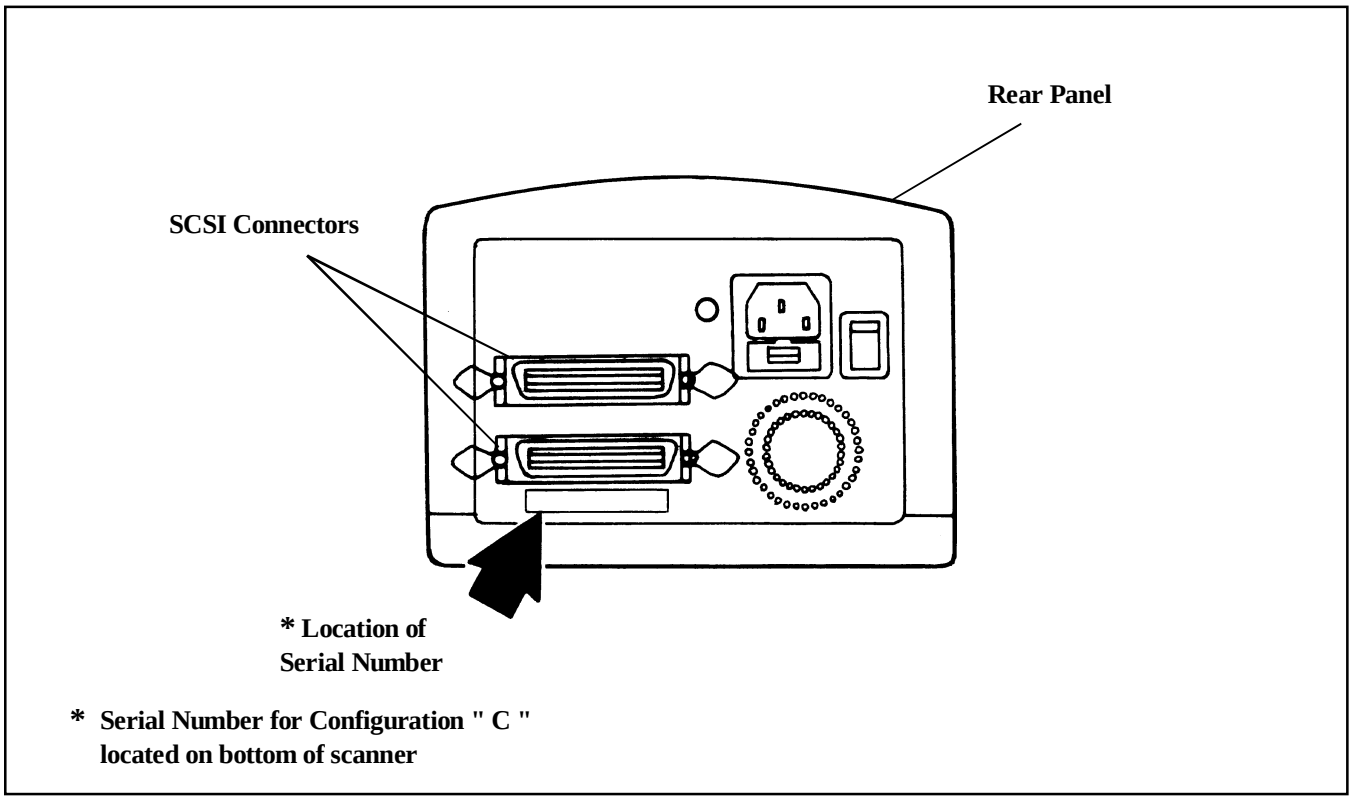


Figure 1. Serial Number Location

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. 35mm Scan # 95-3

DATE: June, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: JIM FEE

SUBJECT: SprintScan 35 SCSI TERMINATION POWER

Problem

SprintScan 35 scanner malfunctions have resently taken place when a laptop computer (PowerBook type) was connected to it. The type of malfunction that took place was a " Scanner Hardware Error ". This type of error prevented the scanner from :

- Properly performing its self-test routine
- Finding its analog range

Investigation found that a blown SCSI interface fuse on the main controller PC board caused the error.

Since laptop computers do not provide termination power, the scanner's external SCSI terminator dragged the SCSI signals to ground prohibiting the laptop computer from properly communicating with its hard drive.

Causes of Blown SCSI Interface Fuse

- Power surges during hot connecting or disconnecting SCSI cable to host computer
- Shorting termination power pin to ground through the SCSI connector
- Incorrectly plugging the scanner into the host computer's parallel port instead of its SCSI port

Caution: NEVER HOT DISCONNECT OR CONNECT THE HOST COMPUTER TO THE SCSI INTERFACE CONNECTOR.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

Checking for Blown SCSI Interface Fuse

1.Turn off the scanner by setting its Power On/Off (**1/0**) switch to Off (**0**).

WARNING

- **When turning on the system always make sure that the scanner is turned on first and then the host computer.**
- **When turning off the system its the opposite - always turn off the host computer first and then the scanner.**

2. Disconnect host computer from the SCSI interface connector.

Note: Do not disconnect SCSI terminator.

3. Turn on the scanner by setting its Power On/Off (**1/0**) switch to On (**1**). The green **Power** LED lights to indicate that the scanner is turned on.

4. During power-up, the scanner initiates its self-test routine. The yellow **Ready** LED is off while the scanner cycles through its self-test routine.

5. Upon completion, the transporter returns to its home position and the yellow **Ready** LED lights steady to indicate that the scanner is ready to operate.

Notes:
- If the yellow **Ready** LED comes on or continually blinks, the SCSI interface fuse is OK.
- If the yellow **Ready** LED is dim, the SCSI interface fuse is blown . Replace SCSI interface fuse as explained in the provided replacement procedure.

Replacing SCSI Interface Fuse

CAUTION

The SCSI fuse is soldered to the main controller PC board. The Main Controller PC Board is particularly sensitive to static discharges. Be sure to use an anti-static mat and wrist strap during this procedure.

1. Remove the top housing as explained in Section 4 of the SprintScan 35 Slide Scanner Service Manual.

2. Unsolder the SCSI interface fuse (Figure 1) and then replace it with a new one.

   Notes: • When replacing it be very careful not to damage the main controller PC board.

   • Fuse Rating - 1.0A Fast Action/Surface Mount

   • Fuse Part Number - 5N0008001

3. Re-install the top housing as explained Section 4 of the SprintScan 35 Slide Scanner Service Manual.

Parts Availability

Fuse 5N0008001 will be available after August 1, 1995 from:

Material Services Department
Polaroid Corporation
201 Burlington Road
Bedford, MA 01730

Please order from normal sources.

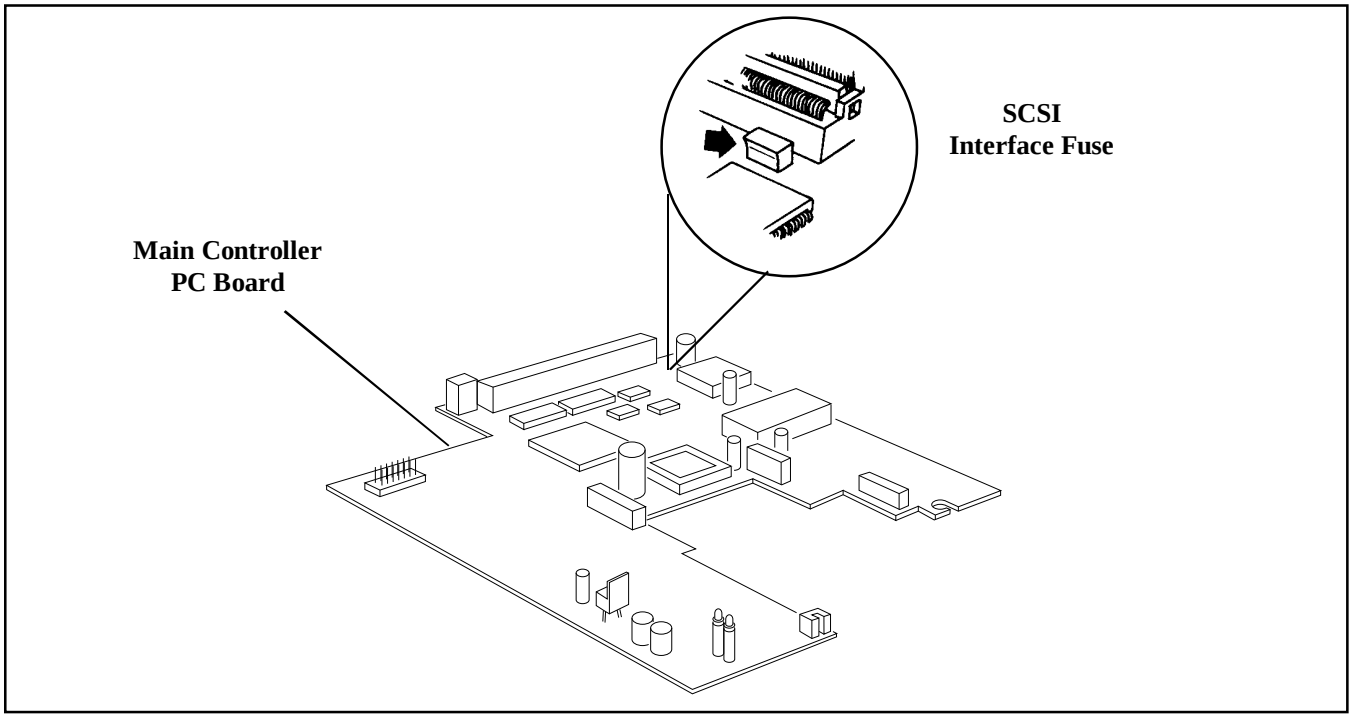


Figure 1 Replacing SCSI Interface Fuse on Main Controller PC Board

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

REPAIR INFO BULLETIN

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

R.I.B. NO. 35mm Scan # 95-4

DATE: June, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **JIM FEE**

SUBJECT: **35mm SprintScan Firmware (CPU) Update/Replacement**

Background

All SprintScan 35mm Scanner's that are returned from the field with any of the following problems must be replaced with the latest firmware (**CPU**).

Note: System software is resident in the firmware (**CPU**).

- Intermittent hanging or crashing during a scan
- Non-repeatable quality from scan-to-scan
- High frequency noise/striping in scanned images (includes diagonal, horizontal or vertical lines)
- Artifacts at non-native resolution settings

SprintScan 35mm Scanner's with serial numbers before **B500634B** must also be replaced with the latest firmware (**CPU**).

Serial Number Location and Identification

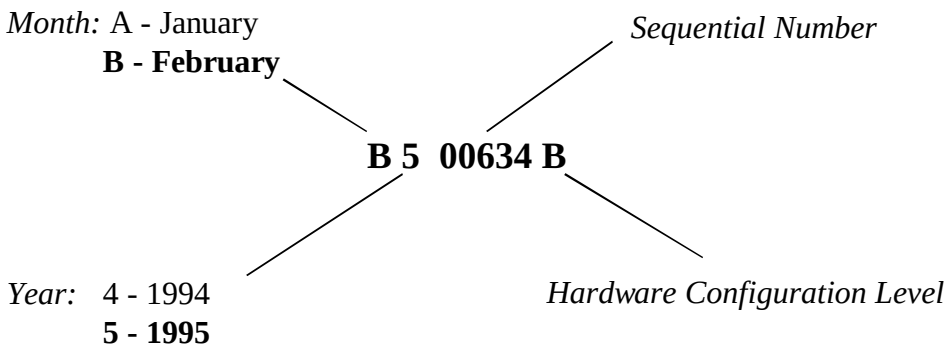
Location (Figure 1)

The Serial Number is located:

- On the outside of the shipping carton (All Configurations)
- Back panel of the Scanner below its SCSI ports (First generation to Configuration " B ")
- Bottom of Scanner (Configuration " C " and all subsequent Configurations)

Identification

The Serial Number identifies the SprintScan 35mm Scanner as follows:



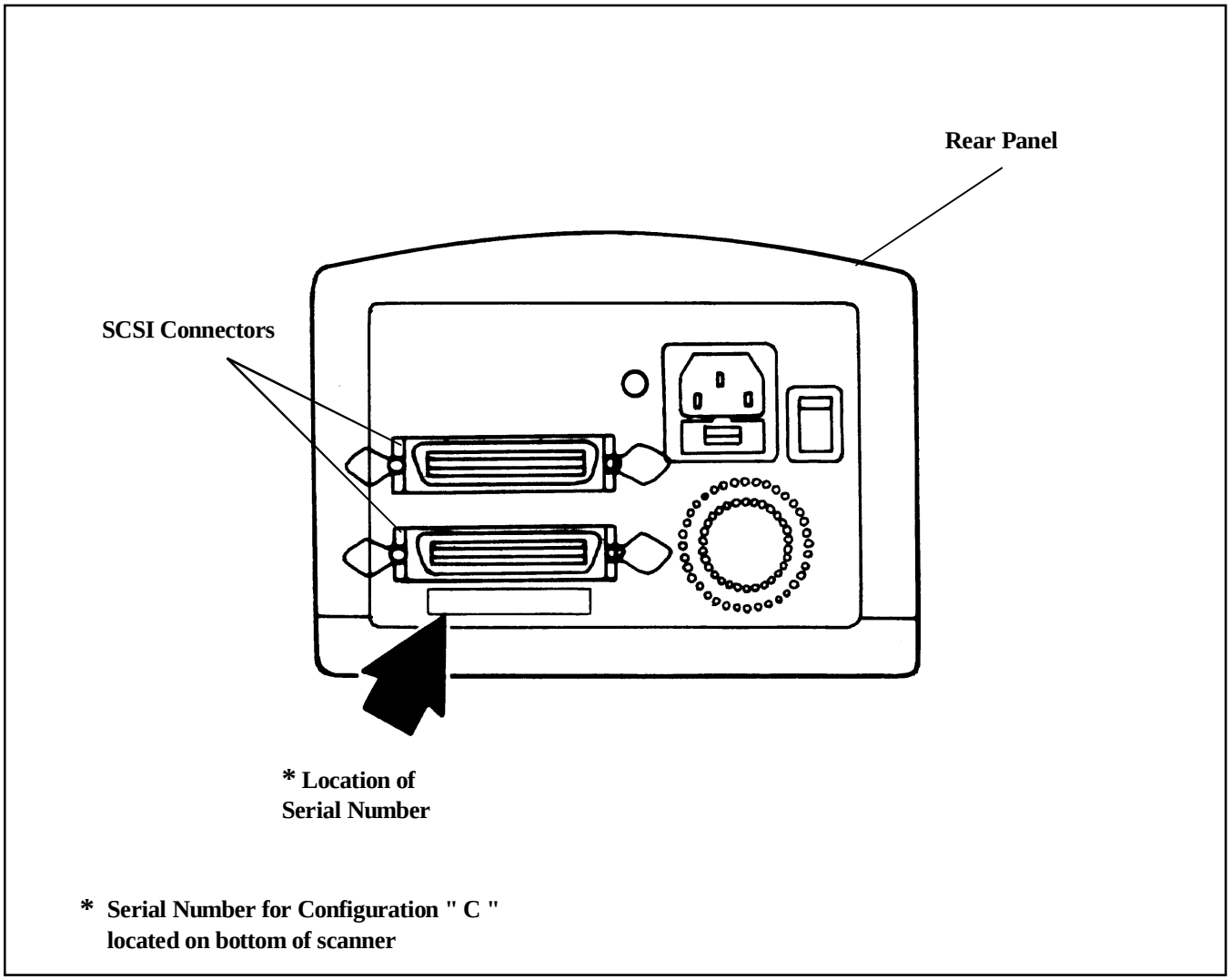


Figure 1. Serial Number Location

FIRMWARE (CPU) UPGRADE/REPLACEMENT

Required Tools

- Anti-Static Mat and Wrist Strap
- Phillips Screw Driver
- Universal PLCC Chip Puller

CPU Removal/Replacement

Caution: The Main Controller PC Board is particularly sensitive to static discharges. Be sure to use an anti-static mat and wrist strap during this procedure.

1. Turn off the SprintScan 35mm Scanner.

2. Unplug the AC power cord and then remove it from the socket of the scanner.

> **HIGH VOLTAGE WARNING**
>
> Failure to remove the power cord from the scanner could cause severe electrical shock.

3. Remove the scanner cover as explained in the SprintScan 35mm Scanner Service Manual.

4. Position the scanner as shown in Figure 2.

   Caution: Always touch the metal plate supporting the SCSI connectors before touching the Main Controller PC Board.

5. Locate the **CPU** on the Main Controller PC Board. Observe its orientation in its socket - dot and beveled corner faces front of scanner (Figure 2).

6. Insert the fingers of the chip puller into the provided slots at the top left and bottom right corners of the socket.

7. Remove the **CPU** by gently but firmly squeezing the handles of the chip puller together.

8. Properly position the replacement **CPU** (Part number 1F4554A) squarely into its socket making sure that its beveled corner goes to the beveled corner of the socket.

9. Place a thumb in the middle of the **CPU** and two fingers underneath it. Evenly squeeze the replacement **CPU** into place.

   Note: The replacement **CPU** should be close to flush and parallel with the top of its socket when it is properly seated.

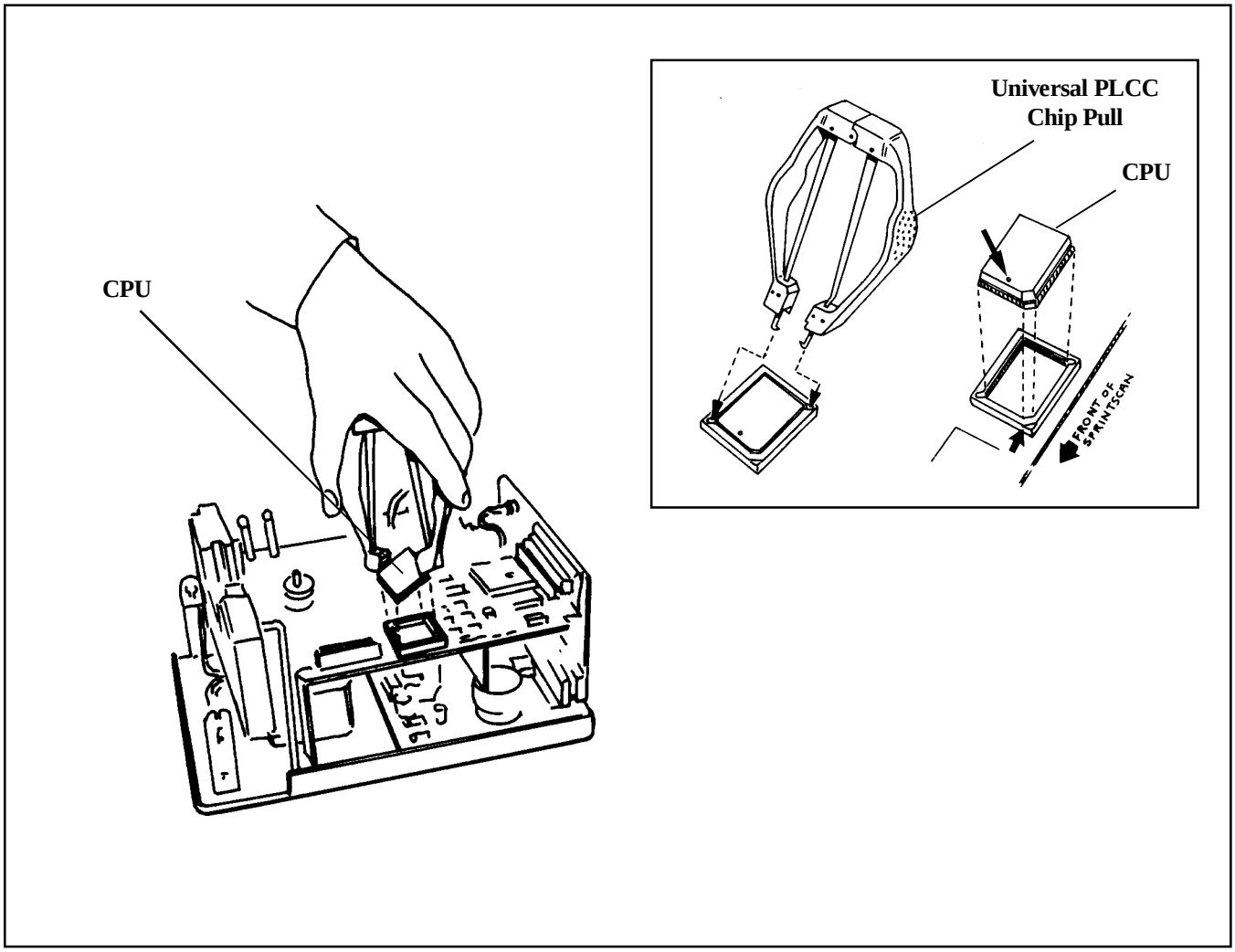


Figure 2. CPU Replacement

10. Install the scanner cover as explained in the SprintScan 35mm Scanner Service Manual.

11. Plug the AC power cord into the socket of the scanner and then plug it into an AC power receptacle.

12. Turn on the scanner by setting its Power On/Off (**1/0**) switch to On (**1**). The yellow **Ready** LED blinks.

    Note: After **CPU** replacement, the power-up sequence must be cycled twice to turn on the scanner.

WARNING

- **When turning on the system always make sure that the scanner is turned on first and then the host computer.**
- **When turning off the system its the opposite - always turn off the host computer first and then the scanner.**

13. During power-up, the scanner initiates its self-test routine. The yellow **Ready** LED is off while the scanner cycles through its self-test routine.

14. Upon completion of the self-test routine, the yellow **Ready** LED continually blinks (flashes) indicating that the **CPU** has been replaced.

15. Power-down, wait approximately 10 seconds and then power-up again. This action resets the system.

16. Upon completion of the self-test routine (passed), the transporter returns to its home position and the yellow **Ready** LED lights steady to indicate that the scanner is ready to operate.

    Note: If the yellow **Ready** LED continually blinks (flashes), the scanner failed its self-test routine. Check and reseat the **CPU**, if necessary and then repeat the power-down, power-up sequence.

17. During the first scan and each subsequent scan that detects drift in the lamp or the front end, the scanner initiates its calibration routine.

Parts Availability

Replacement CPU # 1F4554A is available from:

Material Services Department
Polaroid Corporation
201 Burlington Road
Bedford, MA 01730

Please order from normal sources.

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

REPAIR INFO BULLETIN

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

R.I.B. NO. 35mm Scan # 95-4

DATE: June, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **JIM FEE**

SUBJECT: **35mm SprintScan Firmware (CPU) Update/Replacement**

Background

All SprintScan 35mm Scanner's that are returned from the field with any of the following problems must be replaced with the latest firmware (**CPU**).

Note: System software is resident in the firmware (**CPU**).

- Intermittent hanging or crashing during a scan
- Non-repeatable quality from scan-to-scan
- High frequency noise/striping in scanned images (includes diagonal, horizontal or vertical lines)
- Artifacts at non-native resolution settings

SprintScan 35mm Scanner's with serial numbers before **B500634B** must also be replaced with the latest firmware (**CPU**).

Serial Number Location and Identification

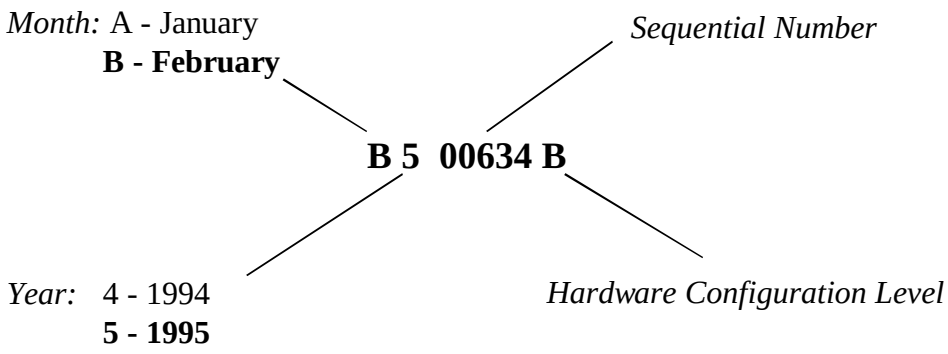
Location (Figure 1)

The Serial Number is located:

- On the outside of the shipping carton (All Configurations)
- Back panel of the Scanner below its SCSI ports (First generation to Configuration " B ")
- Bottom of Scanner (Configuration " C " and all subsequent Configurations)

Identification

The Serial Number identifies the SprintScan 35mm Scanner as follows:



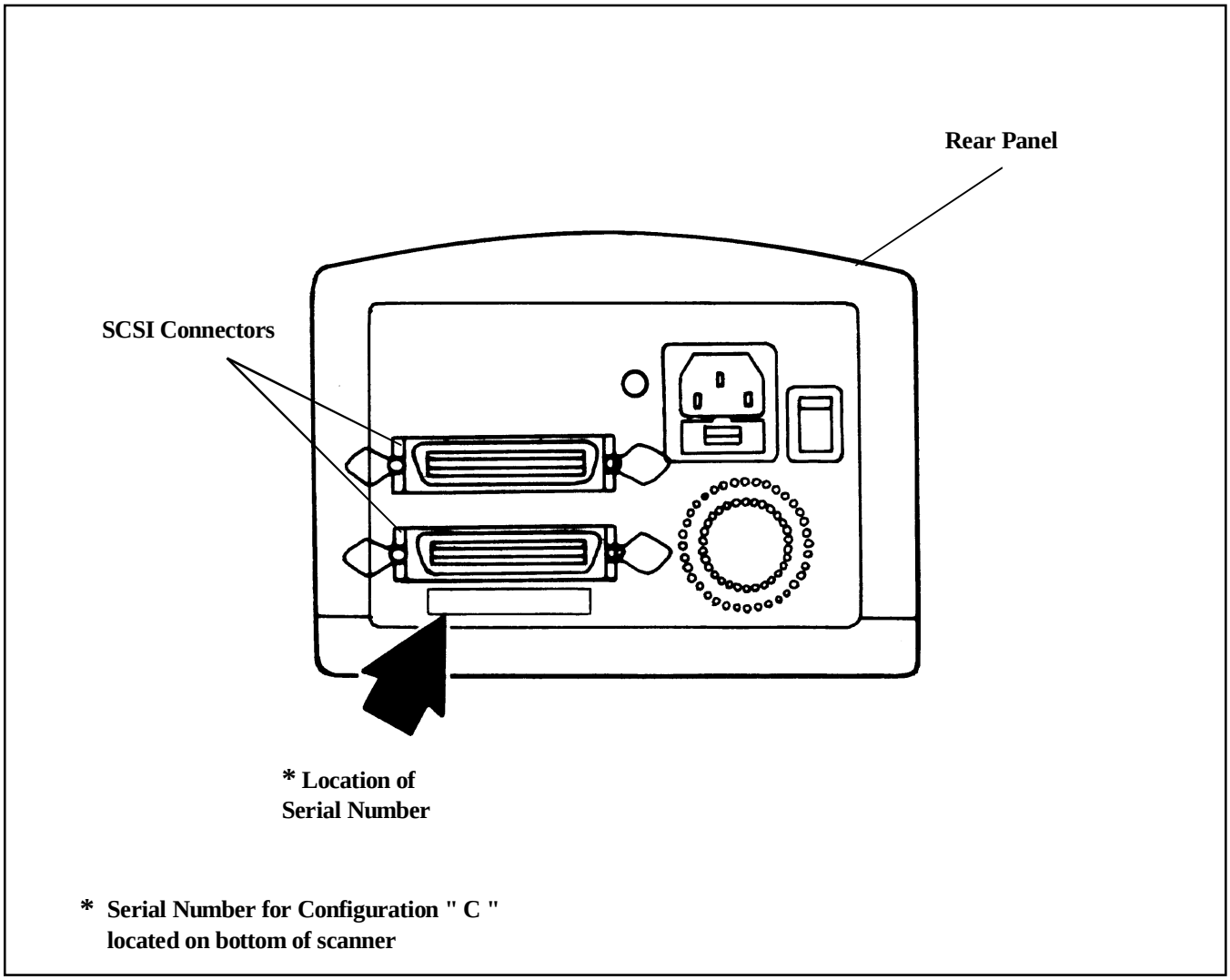


Figure 1. Serial Number Location

FIRMWARE (CPU) UPGRADE/REPLACEMENT

Required Tools

- Anti-Static Mat and Wrist Strap
- Phillips Screw Driver
- Universal PLCC Chip Puller

CPU Removal/Replacement

Caution: The Main Controller PC Board is particularly sensitive to static discharges. Be sure to use an anti-static mat and wrist strap during this procedure.

1. Turn off the SprintScan 35mm Scanner.

2. Unplug the AC power cord and then remove it from the socket of the scanner.

> **HIGH VOLTAGE WARNING**
>
> Failure to remove the power cord from the scanner could cause severe electrical shock.

3. Remove the scanner cover as explained in the SprintScan 35mm Scanner Service Manual.

4. Position the scanner as shown in Figure 2.

   Caution: Always touch the metal plate supporting the SCSI connectors before touching the Main Controller PC Board.

5. Locate the **CPU** on the Main Controller PC Board. Observe its orientation in its socket - dot and beveled corner faces front of scanner (Figure 2).

6. Insert the fingers of the chip puller into the provided slots at the top left and bottom right corners of the socket.

7. Remove the **CPU** by gently but firmly squeezing the handles of the chip puller together.

8. Properly position the replacement **CPU** (Part number 1F4554A) squarely into its socket making sure that its beveled corner goes to the beveled corner of the socket.

9. Place a thumb in the middle of the **CPU** and two fingers underneath it. Evenly squeeze the replacement **CPU** into place.

   Note: The replacement **CPU** should be close to flush and parallel with the top of its socket when it is properly seated.

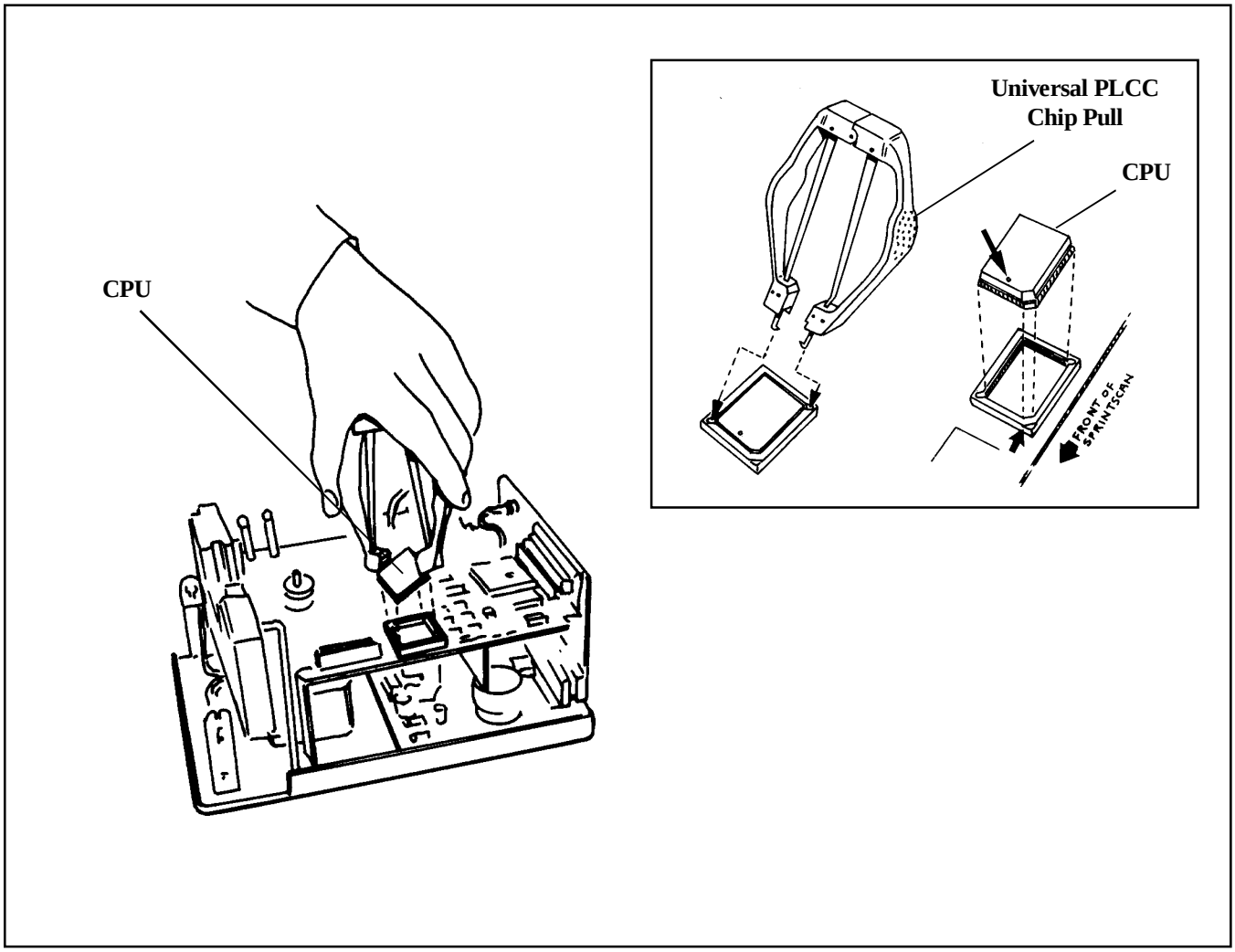


Figure 2. CPU Replacement

10. Install the scanner cover as explained in the SprintScan 35mm Scanner Service Manual.

11. Plug the AC power cord into the socket of the scanner and then plug it into an AC power receptacle.

12. Turn on the scanner by setting its Power On/Off (**1/0**) switch to On (**1**). The yellow **Ready** LED blinks.

    Note: After **CPU** replacement, the power-up sequence must be cycled twice to turn on the scanner.

WARNING

- **When turning on the system always make sure that the scanner is turned on first and then the host computer.**
- **When turning off the system its the opposite - always turn off the host computer first and then the scanner.**

13. During power-up, the scanner initiates its self-test routine. The yellow **Ready** LED is off while the scanner cycles through its self-test routine.

14. Upon completion of the self-test routine, the yellow **Ready** LED continually blinks (flashes) indicating that the **CPU** has been replaced.

15. Power-down, wait approximately 10 seconds and then power-up again. This action resets the system.

16. Upon completion of the self-test routine (passed), the transporter returns to its home position and the yellow **Ready** LED lights steady to indicate that the scanner is ready to operate.

    Note: If the yellow **Ready** LED continually blinks (flashes), the scanner failed its self-test routine. Check and reseat the **CPU**, if necessary and then repeat the power-down, power-up sequence.

17. During the first scan and each subsequent scan that detects drift in the lamp or the front end, the scanner initiates its calibration routine.

Parts Availability

Replacement CPU # 1F4554A is available from:

Material Services Department
Polaroid Corporation
201 Burlington Road
Bedford, MA 01730

Please order from normal sources.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. 35MM Scan 95-5

DATE: June, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: JIM FEE

SUBJECT: STREAKING CAUSED BY DEFECTIVE VERTICAL CLOCK DRIVER (U9)

PROBLEM

Recently a scanner was returned for repair with the customer complaining of streaks in the images. This particular scanner had been upgraded with an issue 02 Controller Board (1E6536). Additionally, the Sensor Board (1E6533) had been upgraded to issue 02. Through thorough engineering analysis the cause of the streaking was positively determined to be a defective vertical clock driver (U9).

This failure warrants special attention because, aside from the streaking, the scanner was normal in every other aspect. The streaks were not visible in all images and it is likely that this unit would have passed LabView testing. Because of the subtlety of this failure mode, **all scanners returned for repair should be subjected to the following test before they are returned to the customer.**

- over -

TESTING

1. Connect the negative lead of a DC voltmeter to the scanner back panel (ground).

2. Place the voltmeter positive probe on the VCLK NEG pad of the Sensor Board (see Figure 1):

   the voltage should be **-6.0 VDC ± .5 volts**

3. Now, place the voltmeter positive probe on the VCLK POS pad of the Sensor Board (Figure 1):

   the voltage should be **8.5 VDC ± .5 volts**

IF EITHER OF THESE VOLTAGES ARE OUT-OF-SPEC, THE SENSOR BOARD MUST BE REPLACED WITH A NEW ONE.

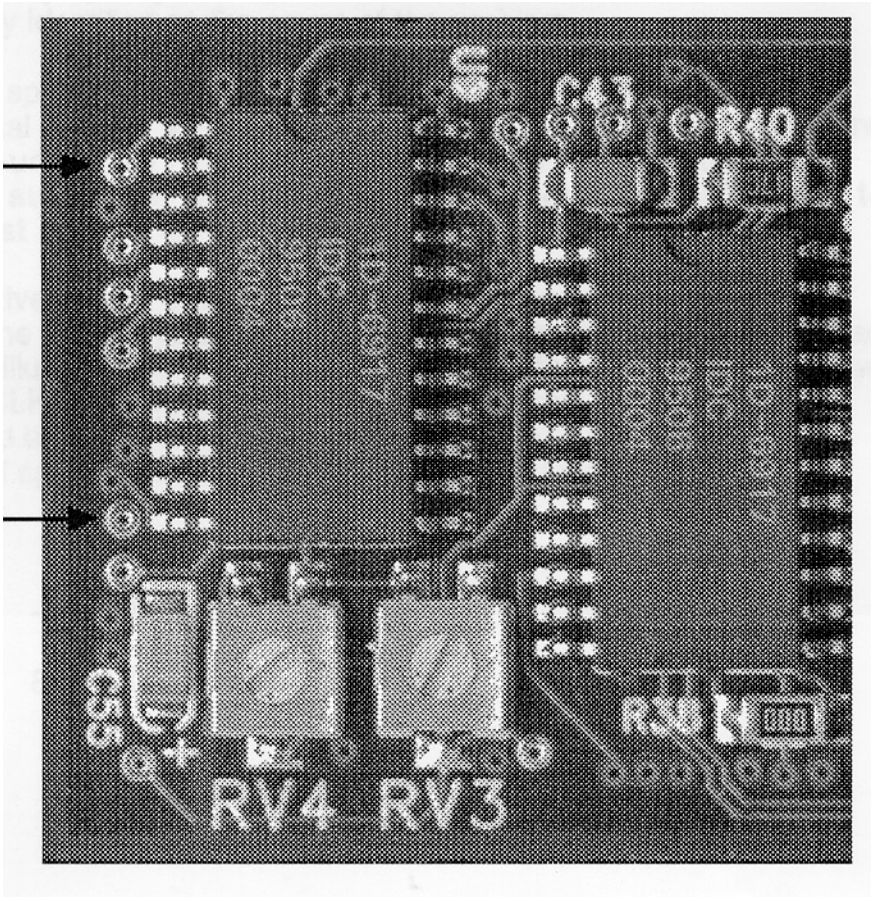


FIGURE 1 SENSOR BOARD TEST POINTS

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201 Burlington Road
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PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. 35 mm Scan #95-5a
DATE: March 1, 1996

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: JIM FEE

SUBJECT: STREAKS

Problem

A SprintScan 35 mm scanner has been recently returned from the field with a streaking problem. Upon close examination, it was determined that this particular scanner had been updated with an issue 02 Controller PC Board and an issue 02 Sensor PC Board. A defective vertical clock driver (**U9**) on the Sensor PC Board was positively identified as the cause of the streaking.

This malfunction requires special attention because, aside from the streaking problem, the scanner functions normally in every way. The streaks were not visible in all images, and it was most likely that this scanner would have passed its LabView test.

Due to this subtle scanner malfunction, it is recommended that all scanners returned for repair should be checked out to make sure that the vertical clock driver (**U9**) on the Sensor PC Board functions properly.

Checking Vertical Clock Driver (Figure 1)

CAUTION

The PC boards inside the scanner are particularly sensitive to static discharge. Be sure to use an anti-static mat and wrist strap during this procedure.

1. Remove the top housing as explained in Section 4 of the SprintScan 35 Slide Scanner Service Manual.

2. Connect the negative lead of a dc voltage meter to the ground located on the scanner back panel.

3. Check the negative (**VCLK_NEG**) and positive (**VCLK_POS**) output voltages of the vertical clock driver (**U9**) on the Sensor PC Board as follows:

    - Connect the positive lead of a dc voltage meter to the negative output voltage (**VCLK_NEG**) pad on the Sensor PC Board. The output voltage should read **- 6.0 vdc +/- .5**.

    - Connect the positive lead of a dc voltage meter to the positive output voltage (**VCLK_POS**) pad on the Sensor PC Board. The output voltage should read **8.5 vdc +/- .5**.

4. If either the **VCLK_NEG** or **VCLK_POS** output voltages are out of specification, replace the Sensor PC Board.

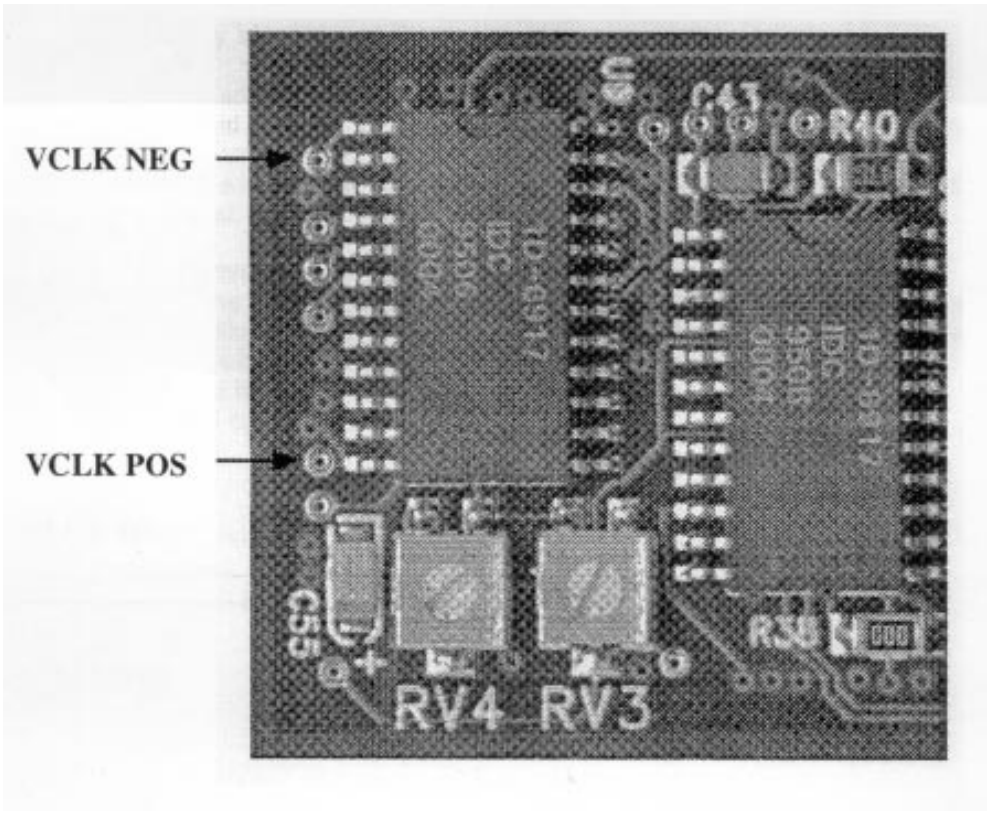

Figure 1. Sensor PC Board Test Points

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TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
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☐ **SPECIAL**

P.A. NO. 35 mm Scan #96 -1
DATE: March 1, 1996

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: JIM FEE

SUBJECT: LOW LEVEL HORIZONTAL BANDS

Background

SprintScan 35 mm scanners have been recently returned from the field with two discernible types of low level horizontal band problems. Table 1 list the problem types, causes and action that is needed to correct the problem.

Problem 1

This low level horizontal band problem was caused from SCSI termination power load variations. The load on the scanner's 5 vdc power supply that was required to supply SCSI termination power during burst activity caused low frequency cross-regulation on the power supply's 15 vdc line voltage. This coupled into the output images through the CCD.

As seen on a PC, the output images showed low level horizontal bands that tended to be fairly neutral in color and usually had a period of 64k bytes.

As seen on a MAC, the output images showed low level horizontal bands that tended to be faint colored bands which at the highest resolution were grouped into RGB or CMY consecutive bands separated by 32 lines vertically Red-to-Green and Green-to-Blue (or Cyan-to-Magenta and Magenta-to-Yellow). Usually only one or two of the bands in a group were visible as a function of the image content (color and details). When first seen , they were most often visible in negatives in areas of flat pastels such as blue sky.

Problem 2

This low level horizontal band problem was caused by unexpected CCD behavior when operated under common modes using certain negative film files, or with scanner's with particularly dimmed bulbs and more negative film files. This effect which seemed only to appear in a fraction of the scanners caused a slight increase in the blue signal for one or two lines only at a stop-start boundary, resulting in a faint blue horizontal band. Based on the platform speed, available memory, scan widths etc., stop-starts could be invoked as low as half of full resolution. Due to the nature of the negative film files, the effect may be seen primarily in the blue channel, and secondarily in the red. It differs in nature to the SCSI related banding in that it appears to be limited to one or two lines, and requires a stop-start to appear at all. In general it is much more difficult to detect than the SCSI related banding, which does not necessarily have to be connected to a stop-start.

Table 1. Low Level Band Problems

Problem	Cause	Corrective Action
1	**CCD Susceptible** Made worse if: • Host computer has blown termination fuse or low termination power supply. • Scanner's 5 vdc power supply high.	PC - If no writable storage devices on SCSI bus (hard drives, etc.), run with no external terminator with a short SCSI cable. MAC - Run with scanner 1ST in SCSI chain (closest to host computer) and place the external terminator at the end of the chain.
	Controller PC Board (Issue 04)	Replace termination power diode - Phillips PRLL5817 with BYD77A. **Note:** Replacement of the termination power diode reduces the scanner termination power to a voltage lower than the host computer reducing the banding effect significantly as long as the host or another SCSI peripheral provided nominal termination power. **Host computer must not have blown termination power fuse.**
2	**CCD susceptible, problem may occur with negative film tables:** • Fuji Reala 4F • Kodak Ektapress 400 67 • Fuji HG 1600 6D • Kodak Ektar 6F • Fuji Super G 400 75 • Kodak Ektapress 1600 75	• Try to repeat problem with a lower table on the list. If it occurs with the last few tables, switch film tables. • Replace firmware with version 1.02 or above.
	Aging bulb with CCD susceptible, problem may occur with negative film tables: Kodak Royal Gold 77 Fuji HG 400 7D Fuji Super G 100 83 Kodak Gold 88 Kodak VPS 8A	• Try to repeat problem with a lower table on the list. If it occurs with the last few tables, switch film tables. • Replace bulb. • Replace firmware with version 1.02 or above.

Table 1. Low Level Band Problems (Con't)

Problem	Cause	Corrective Action
2 (Con't)	**Really dim bulb with CCD susceptible, problem may occur with negative film tables:** Polaroid One Film 94 Agfa Optima 96 Polaroid HD3 9C Raw Negative AE Generic Negative AE	• Try to repeat problem with a lower table on the list. If it occurs with the last few tables, switch film tables. • Replace bulb. • Replace firmware with version 1.02 or above.

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201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. 35 mm Scan # 96-2
DATE: March 1, 1996

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: JIM FEE

SUBJECT: DRIVE MOTOR SCREW PITCH

Scanner drive motors with an incorrect screw pitch of **.06** have been mistakenly placed into stock. The screw pitch for the scanner drive motor should be **.074**.

When replacing a drive motor always make sure it has the correct screw pitch. Figure 1 shows the correct drive motor type to be used. If the drive motor is incorrect, please send it back to materials control for replacement.

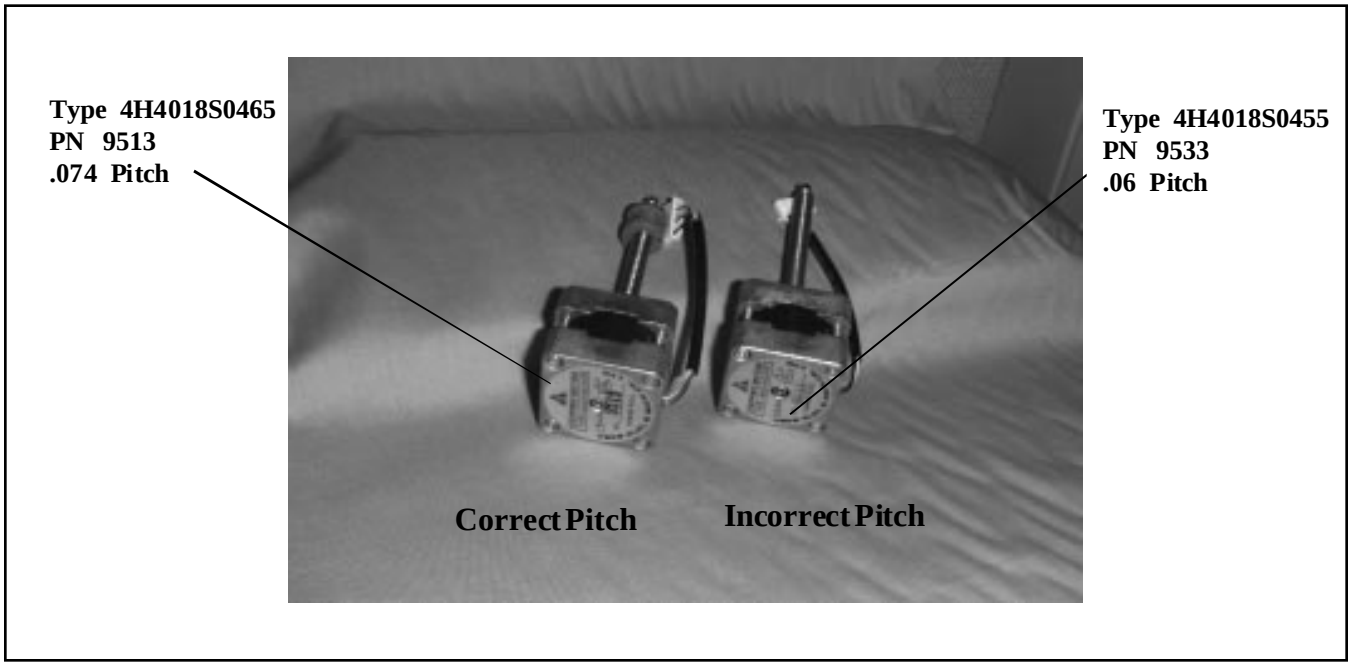

Figure 1. Drive Motor

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201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
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☐ **SPECIAL**

P.A. NO. 35 mm Scan #96-3
DATE: March 1, 1996

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: JIM FEE

SUBJECT: STREAKS INDUCED BY ANALOG NOISE

Problem

SprintScan 35 mm scanners have been recently returned from the field with streaking problems induced by analog noise from its power supply and inverter PC boards. To rectify this problem it is recommended that a metal protective shield (PN 1E1159A) be installed above its power supply and inverter PC boards.

Metal Protective Shield Installation (Figure 1)

CAUTION

The PC boards inside the scanner are particularly sensitive to static discharge. Be sure to use an anti-static mat and wrist strap during this installation procedure.

1. Remove the top housing as explained in Section 4 of the SprintScan 35 Slide Scanner Service Manual.

2. Disconnect the following electrical cables from the controller PC board:

   - J1 (Transport Stepper Motor)
   - J3 (CCD PC Board)
   - J4 (Filter Wheel Stepper Motor)
   - J5/J6 (Power Supply)

3. Remove the four (4) screws that secures the controller PC board to the chassis mount assembly and to its bottom case supports.

4. Gently lift off the controller PC board so that you can easily access the three (3) screws that secures the chassis mount assembly to its bottom case supports.

5. Remove the three (3) screws that secures the chassis mount assembly to its bottom case supports.

6. Gently lift off the chassis mount assembly being careful not to damage the CCD PC board.

7. Install the metal protective shield as follows:

    - Remove the four (4) screws that secures the power supply PC board to the bottom case.
    - Place the metal protective shield over the power supply PC board making sure its feet are properly aligned with the mounting holes on the power supply PC board.
    - Install and tighten the four (4) secures that secures the metal protective shield and power supply PC board to the bottom case.

8. Install and tighten the three (3) screws that secures the chassis mount assembly to its bottom case supports.

9. Install and tighten the four (4) screws that secures the controller PC board to the chassis mount assembly and to its bottom case supports.

10. Connect the following electrical cables to the controller PC board:

    - J1 (Transport Stepper Motor)
    - J3 (CCD PC Board)
    - J4 (Filter Wheel Stepper Motor)
    - J5/J6 (Power Supply)

11. Install the top housing as explained in Section 4 of the SprintScan 35 Slide Scanner Service Manual.

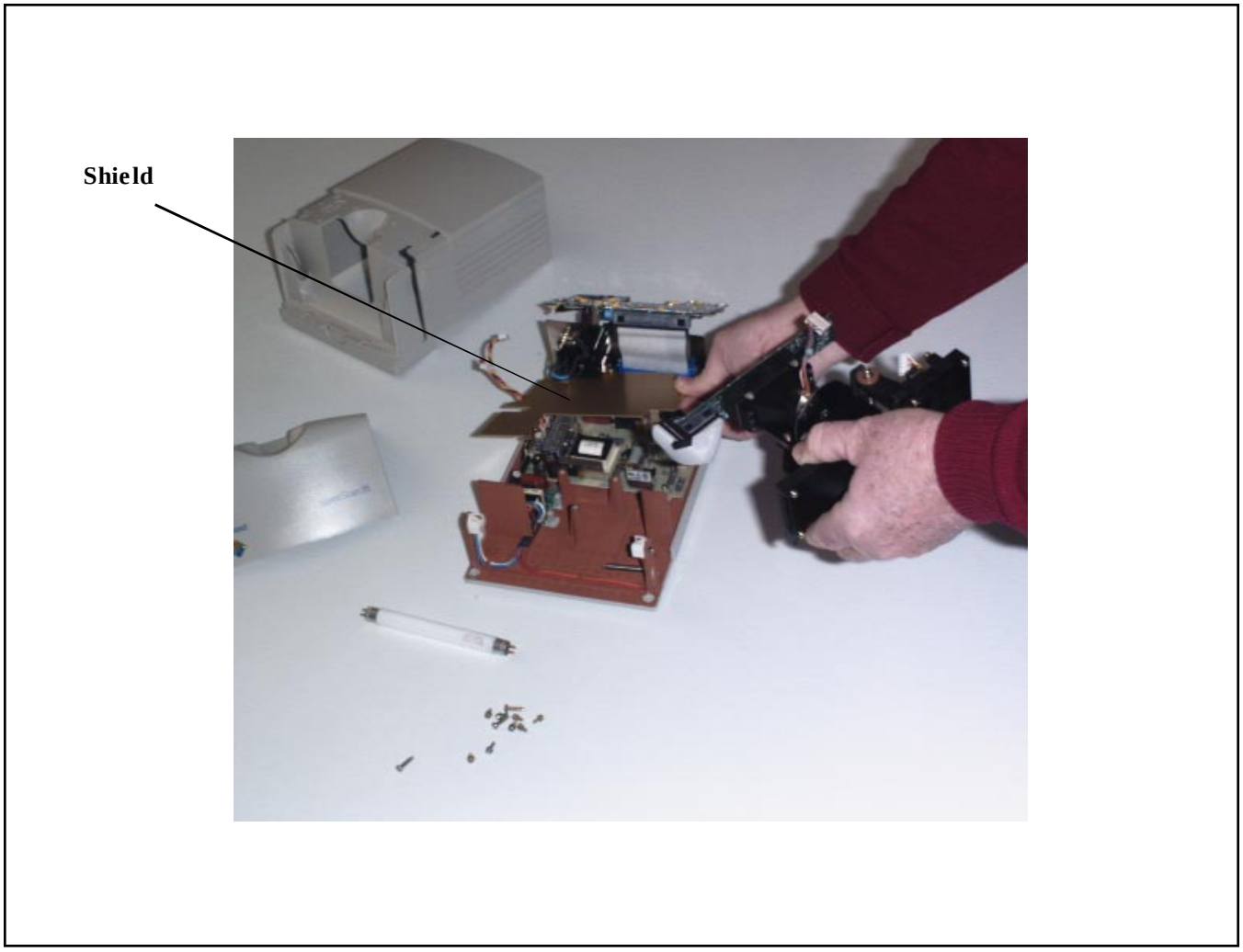


Figure 1. Metal Protective Shield

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P. A. NO. 35mm Scan # 96-4

DATE: March, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **JIM FEE**

SUBJECT: **35MM SPRINTSCAN FIRMWARE/HARDWARE UPDATE**

Background

All SprintScan 35mm Scanner's that are returned from the field with firmware **.77** through **.85** must be replaced with the latest firmware.

This Product Alert also lists the past and current hardware updates to the SprintScan 35mm scanner.

Firmware Updates

Table 1 lists and describes the past and current modifications made to the scanner's firmware.

Table 1. Firmware Updates (Past and Current)

Version	Description	Function
.77	None.	First generation of firmware.
.78	Improves uniformity correction.	Reduces high frequency noise in scanned image.
.81	• Improves uniformity correction.	• Reduces high frequency noise in scanned image.
	• Tightens amount of drift allowed before the scanner recalibrates.	• Improves scan-to-scan repeatability.
	• Fixes decimation artifact.	• Eliminates horizontal lines at non-native resolution settings.
.82	Fixes timing glitch in new ASIC's.	Eliminates scanner hang-up caused by timing glitch while scanning.
.83	Eliminates race condition while scanning on Power PC.	Eliminates scanner hang-up caused by race condition while scanning negatives.
.84	Eliminates race condition while acquiring image date.	Eliminates scanner hang-up caused by special software.
.85	Eliminates timing bug.	Corrects image line count.
1.0	Masked programmed.	Incorporates hardware diagnostics.
1.02	Eliminated LSYNC time out errors.	Corrected false LSYNC error condition. **Note:** Sometimes a scanner with a CCD with a new metal mask fails to calibrate after the new version of firmware is installed. If this happens, replace the new firmware with version 1.0.

Firmware Version Identification

There are two methods to identify the version of firmware being used by the scanner:

- Visual
- Software

Visual Identification

Remove the scanner cover and look at the label affixed to the firmware. This label contains firmware version currently being used by the scanner.

Software Identification

MAC

Double click the mouse on the SCSI Probe. The SCSI Probe will display all the SCSI devices.

ID	Type	Vendor	Product	Version
1				
2				
3				
4				
5				
6	**SCAN**	**Polaroid**	**35mm**	**.85**
7				

Windows

Click the mouse on the **About Box**. The **About Box** will display the firmware version (i.e., **.85**).

Parts Availability

Replacement firmware (PN 1F4699A) is available from:

Material Services Department
Polaroid Corporation
201 Burlington Road
Bedford, MA 01730

Please order from normal sources.

Hardware Updates

Table 2 lists and describes the past and current modifications made to the scanner's hardware.

Table 2. Hardware Modifications

Serial Number	Suffix	Description	Function
H400235	None - First generation	N/A	N/A
L400500A	**A**	Filter wheel changed.	Changes filter wheel neutral density from 0.5 to 0.6 and ensures scanning uniformity with all color channels.
M40033B	**B**	Controller PC board modified.	Reduces noise to prevent vertical\diagonal lines.
C5001762C	**C**	Adds slot cover to chassis assembly.	Inhibits filter wheel from over rotating and getting lost, stuck, or jammed.
L5110253D	**D**	Added:	
		• New inverter PC board.	• Extends lamp life.
		• Metal protective shield between power supply and inverter PC boards.	• Shields the system electronics against power supply and inverter induced analog noise. (This eliminated streaks caused by the induced analog noise.)

Serial Number Location and Identification

Location (Figure 1)

The Serial Number is located:

- On the outside of the shipping carton (All Configurations)
- Back panel of the Scanner below its SCSI ports (First generation to Configuration " B ")
- Bottom of Scanner (Configuration " C " and all subsequent Configurations)

Identification

The Serial Number identifies the SprintScan 35mm Scanner as follows:

Month: A - January
B - February

Sequential Number

B 5 00634 B

Year: 4 - 1994
5 - 1995

Hardware Configuration Level

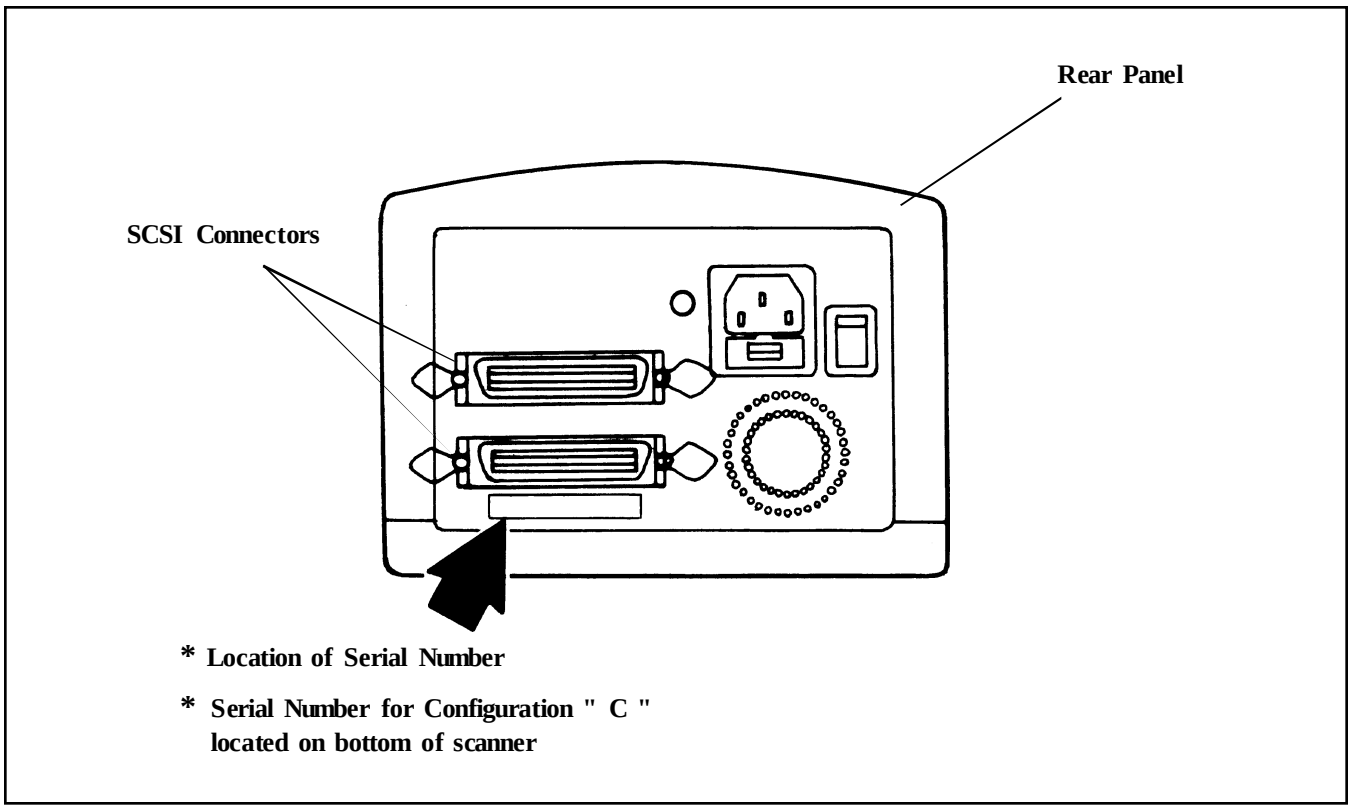


Figure 1. Serial Number Location

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P. A. NO. 35mm Scan # 96-6

DATE: March, 1996

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **JIM FEE**

SUBJECT: **CONTROLLER PC BOARD UPDATE/REPLACEMENT**

BACKGROUND

Currently, all SprintScan 35's are being manufactured with a new Light Tunnel assembly. This change replaces the existing filter wheel and motor assembly. Because of this change the Controller PC Board was updated to version 07.

Note: SprintScan's with serial number B60xxxE and above contain the new Light Tunnel assembly and the updated (version 07) Controller PC Board.

Both versions (01-04 and 07) of Controller PC Board (Figure 1) can be used in the existing and modified SprintScan 35. Table 1 shows the differences between the old style (version 01-04) and the new style (version 07) of the Controller PC Board.

Table 1. Controller PC Board

	Old Style	**New Style**
Part Number	1E6536 / 01-04	1E6536 / 07
Resistor R5	Populated	Not Populated
Optical Switch U4	Populated	Not Populated
Filter Wheel Connection	Connected (J4)	Not Used (J4)

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

Old Style
(P/N 1E6536 / 01-04)

New Style
(P/N 1E6536 / 07)

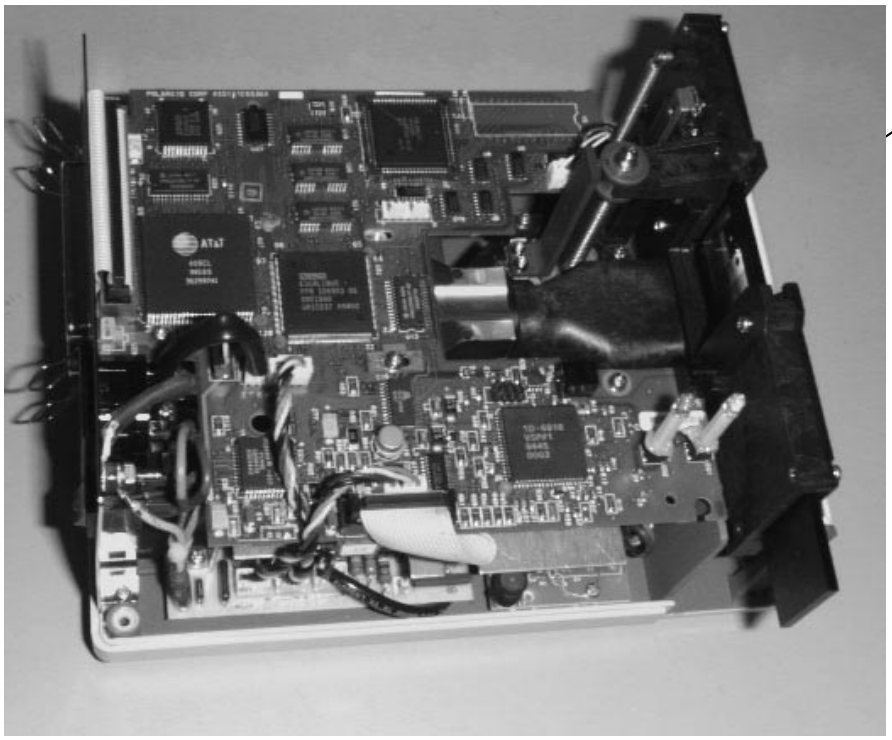


Figure 1. Controller PC Board

Controller PC Board Replacement

As stated, both versions (01-04 and 07) of Controller PC Board (Figure 1) can be used as a replacement part for the existing and modified SprintScan 35. However, certain conditions must be met to achieve interchangeability. Table 2 shows what must be done to achieve interchangeability.

Note: Currently, both styles of the Controller PC Board are stocked by CSS. Once the old style Controller PC Boards are depleted, only the new style Controller PC Board will be ordered.

Table 1-2. Controller PC Board Interchangeability

	SprintScan 35 with Filter Wheel	**SprintScan 35 with Light Tunnel**
Old Style Board	Direct Replacement.	Can be used as a replacement with following change/changes: • Resistor **R5** must be unsoldered and removed.
New Style Board	Can be used as a replacement with following change/changes: • Remove resistor **R5** from the old PC Board being removed and solder it onto the new replacement PC board. • Remove optical switch **U4** from the old PC Board being removed and solder it onto the new replacement PC board. • Connect filter wheel assembly cable to connector **J4**.	Direct Replacement.

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P. A. NO. 35mm Scan # 97-1
DATE: April, 1997

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **Gerald DiBello**

SUBJECT: **2-PIXEL WIDE STREAKS CAUSED BY DEFECTIVE A/D CONVERTER (U18)**

Background

One to two percent of SS35 Plus controller PC boards (P/N AA0977A) produced in 1996 may have a defective A/D converter (U18 - P/N ***XR*** **D8794AIK**). Defective A/D converters cause random vertical streaks spaced 2-pixels apart in the scanned images.

Suspected A/D converters have a date code less than **9646** (Figure 1).

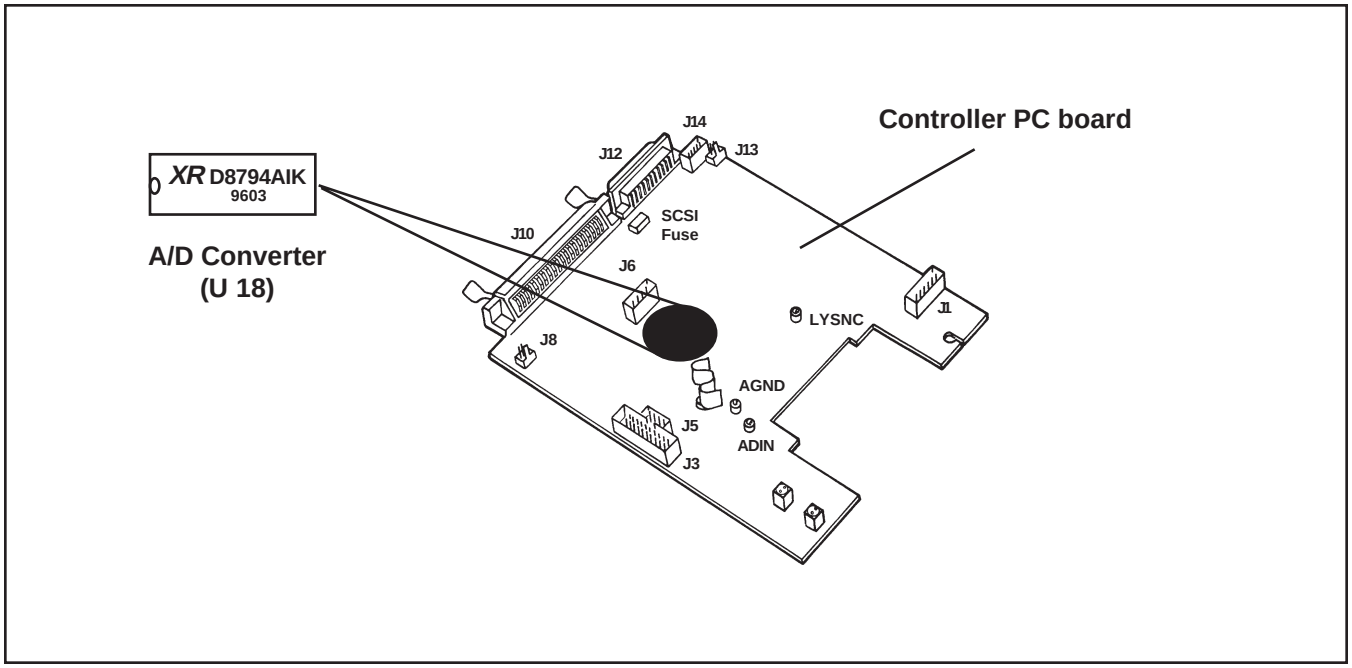


Figure 1. A/D converter location

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

This failure requires special attention because, aside from the vertical streaks, the slide scanner operates normally in all other aspects. The streaks will not be visible in all scanned images and **it's possible** that the slide scanner will pass a LabView test.

Because of the subtlety of this malfunction, it is recommended that all SS35 PLUS slide scanners returned for repair with serial numbers from **H6 XXXXX Y** to **M6 XXXXX Y** (**X** is a number from **0** to **9**, **Y** is a letter from **A** to **Z**) be tested before they are returned.

Serial Number Identification and location

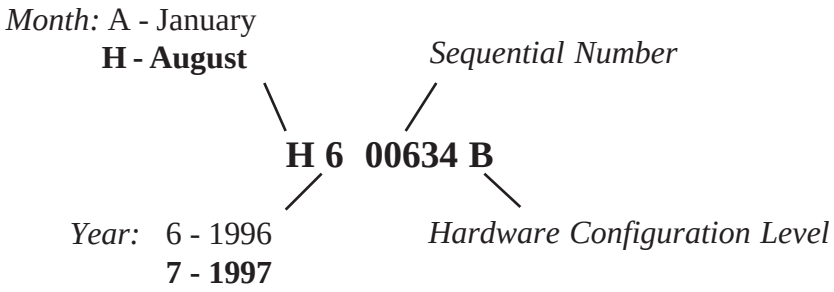
Identification

The serial number identifies the SS35 PLUS slide scanner as follows:

Notes:

- If the slide scanner serial number is from **H6 XXXXX Y** to **M6 XXXXX Y** (**X** is a number from **0** to **9**, **Y** is a letter from **A** to **Z**), testing is required. Perform the A/D Converter Streak Test procedure in this Product Alert.

- If the slide scanner serial number is not from **H6 XXXXX Y** to **M6 XXXXX Y** (**X** is a number from **0** to **9**, **Y** is a letter from **A** to **Z**), no testing is required.



Location (Figure 2)

The Serial Number is located:

- On the outside of the shipping carton
- Bottom of the slide scanner

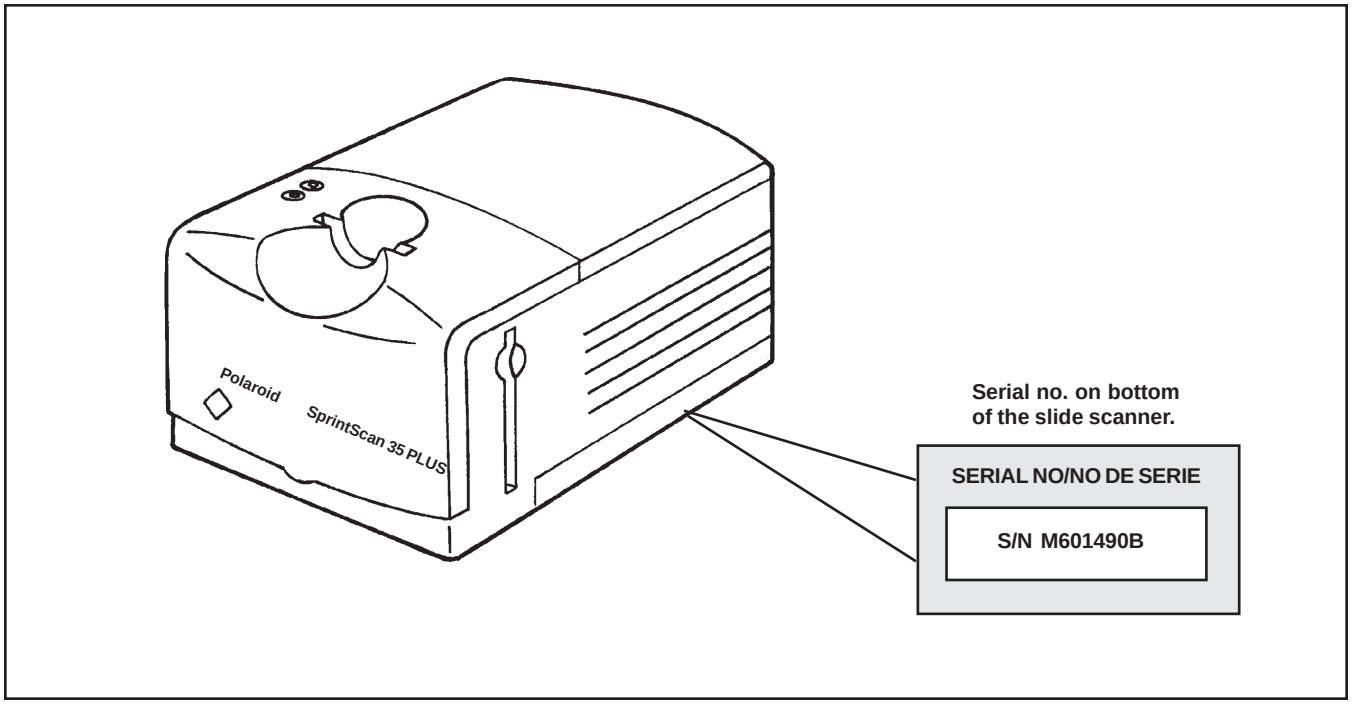


Figure 2. Serial number location

Checking and Testing

Tools Needed

- Anti-Static Mat and Wrist Strap
- Phillips Screwdriver
- EXAR A/D Streak Test Kit P/N 13700 (Includes: 1 DSHD Disk, 1 Streak Target)
- Macintosh 68k or Power PC computer with at least 24MB of RAM
- Adobe PhotoShop version 3.0.5 or higher
- SprintScan 35ES and 35Plus Software for Macintosh version 2.6 or higher

Software Installation

Load film files **Ident4x.CV2** and **SS35P.CV2** from the EXAR kit disk into **SprintScan 35p folder**.

Note: Path to folder:

System Folder - **Preferences** - **SprintScan 35** - **SprintScan 35p**

Previewing Streaks

Images that may be opened and viewed in Adobe PhotoShop are provided on the disk included with the EXAR A/D Streak Test Kit. These pictures preview the images seen after scanning the streak target on a test unit.

Files showing scanned images from normal and defective A/D converters are provided. There are four (4) image files on the disk:

- Normal Preview - Screen shot (Figure 3)
- Normal ADC - JPEG image (Figure 4)
- Defective Preview - Screen shot (Figure 5)
- Defective ADC - JPEG image (Figure 6)

Preview Scan of Streak Target Image - Normal Operating A/D Converter

The file **Normal Preview** (Figure 3) is a screen shot showing an Adobe PhotoShop window after **Acquire - SprintScan 35** is selected from the File menu.

Note: For later versions of Adobe Photoshop, **Import - SprintScan 35** is selected from the File menu.

The right side of the image shows the steak target preview image produced on a slide scanner with a normal operating A/D converter. Notice the selected area that was chosen for the final scan.

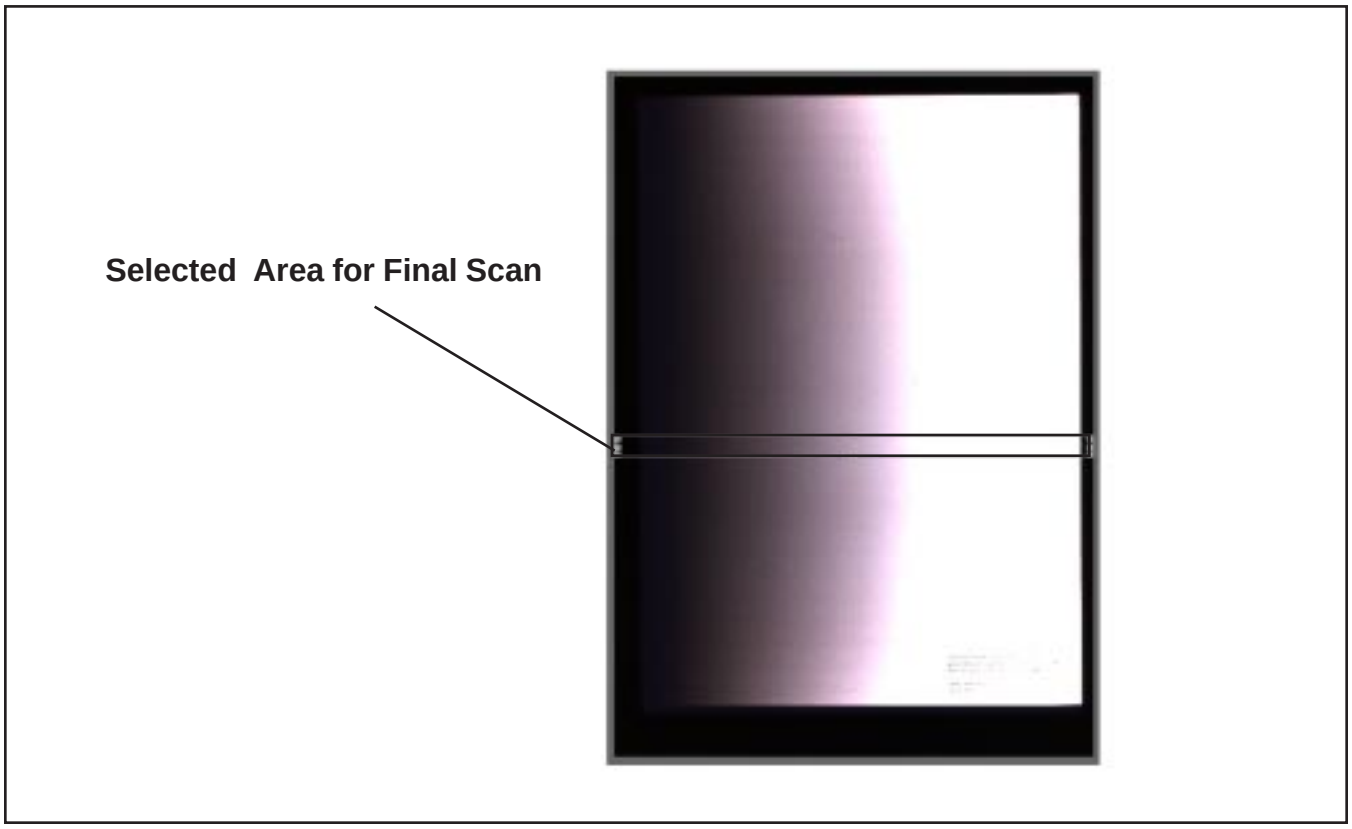


Figure 3. Preview scan of streak target image - normal operating A/D converter

Final Scan of Streak Target Image - Normal Operating A/D Converter

The file **Normal ADC** (Figure 3) is an actual JPEG format file that was saved after the **Scan** button was selected. Just the selected area (Figure 4) in the **Normal Preview** screen is shown. It is the magnified image (1:4) of a portion of the streak target produced from a slide scanner with a normal operating A/D converter. **Further magnify the image to 1:1.** Use the scroll buttons in the window to view the scanned area.

Figure 4. Final scan of selected area - no streaks

Preview Scan of Streak Target Image - Defective A/D Converter

The file **Defective Preview** (Figure 5) is a screen shot showing a Adobe Photoshop window after **Acquire - SprintScan 35** is selected from the File menu.

The right side of the image shows the steak target preview image produced on a slide scanner with a defective A/D converter. Notice the selected area that was chosen for the final scan. Also notice the vertical lines that show even in the preview scan.

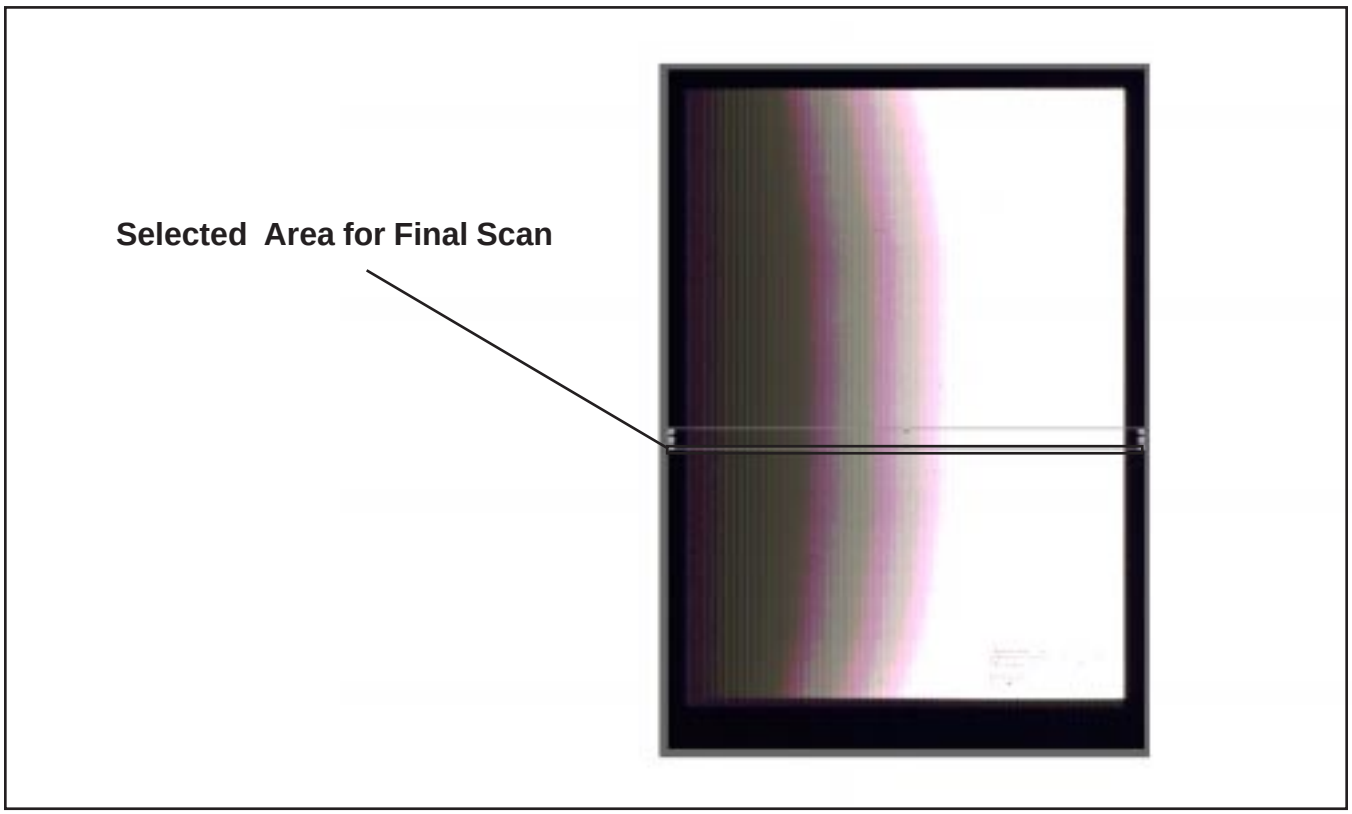


Figure 5. Preview scan of streak target image - defective A/D converter

Final Scan of Streak Target Image - Defective A/D Converter

The file **Defective ADC** (Figure 5) is an actual JPEG format file that was saved after the **Scan** button was selected. Just the area selected (Figure 6) in the **Defective Preview** screen is shown. It is the magnified image (1:4) of a portion of the streak target produced from a slide scanner with a defective A/D converter. Further magnify the image to 1:1. Vertical lines can be clearly seen spaced two pixels apart which are produced by the defective A/D converter.

Figure 6. Final scan of selected area - two pixel streaks

Checking Date Code of A/D Converter

Caution

The controller PC board is sensitive to static discharges. Be sure to use an anti-static mat and wrist strap when removing and replacing it.

1. Turn off the slide scanner.

2. Unplug the AC power cord and remove it from the socket at the back of the slide scanner.

3. Remove the top cover of the slide scanner as explained in the SS35 Slide Scanner Repair Manual.

4. Check the date code of A/D converter U18. Date code is located just below the A/D converter part number (Figure 7).

   Note: • If the date code of A/D converter U18 is lower than 9646 (Example: 9645), it may be defective. Perform the A/D Converter Streak Test procedure to determine if it is defective. If necessary, replace the controller PC board.

   • If the date code of A/D converter U18 is 9646, or higher, there is no need to perform the A/D Converter Streak Test procedure. Assuming the slide scanner has passed all other testing, replace the top cover and return it to the customer.

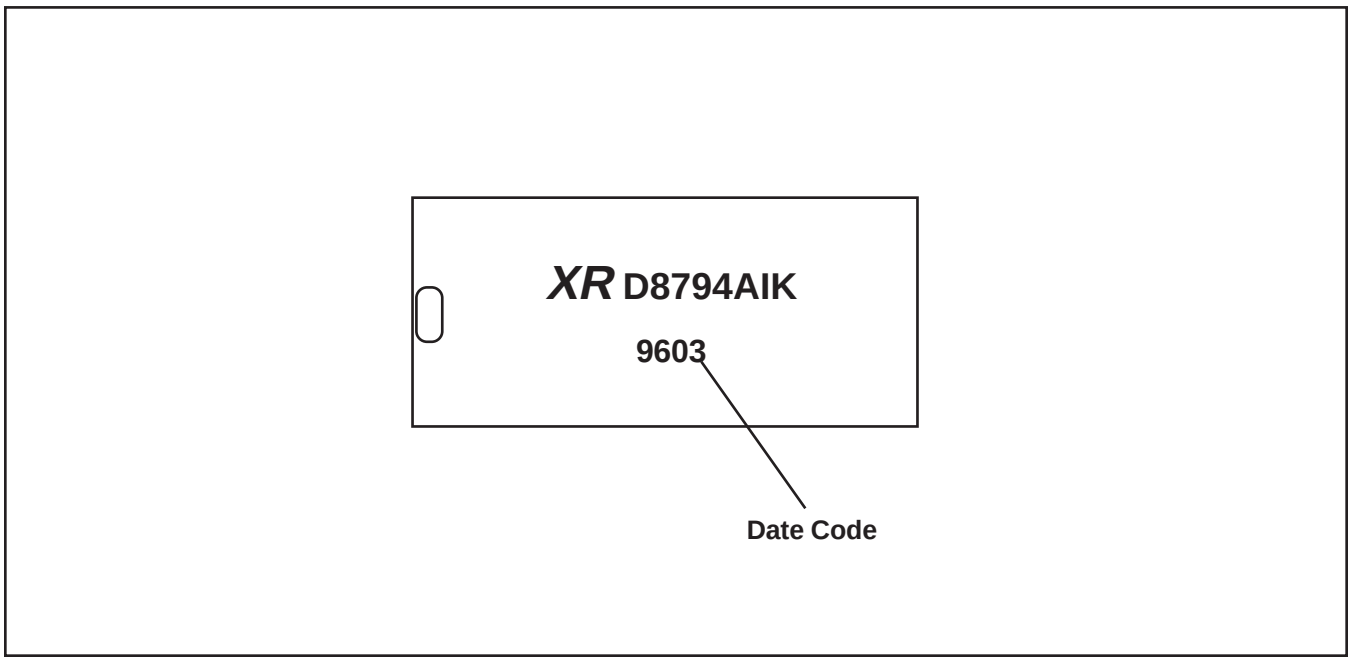


Figure 7. A/D converter U18

A/D Converter Streak Test

1. Plug the AC power cord into the socket of the slide scanner and then plug the other end into an AC power outlet.

2. Connect the SCSI cable to the host computer. Turn the terminator switch on the slide scanner's back panel to its **ON** position.

3. Turn on the slide scanner by setting its Power On/Off (**1/0**) switch to its On (**1**) position.

   The slide scanner should turn on and, after its self test sequence completes, the green and yellow status lamps will be on continuously.

4. Insert the streak target from the EXAR A/D Streak Test Kit into the slide scanner carriage.

   The arrow on the front of the streak target should face toward the lamp with the arrow at the bottom facing toward the front of the slide scanner and pointing down.

5. From the Adobe Photoshop **File** menu, select:

   Acquire - SprintScan 35…
   or
   Import - SprintScan 35… (depending on the version of Adobe Photoshop)

6. When the Settings Dialog box (Figure 8) appears, setup fields as follows:

   - Set **Resolution:** to **2700 dpi**
   - Set **Film:** to **Ident4x.CV2**
   - Turn off **Automatic Exposure** control in the Preferences Dialog box
   - Set **View:** to **Portrait** mode

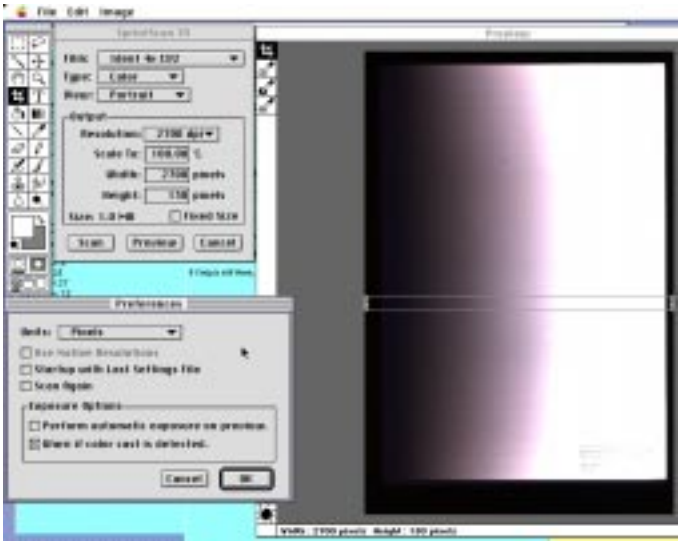


Figure 8. Setting dialog box

7. Click on the **Preview** button to preview the streak target.

8. Once the streak target preview image appears (Figure 9), select a small area for scanning (2700 x 130), at 100% scaling.

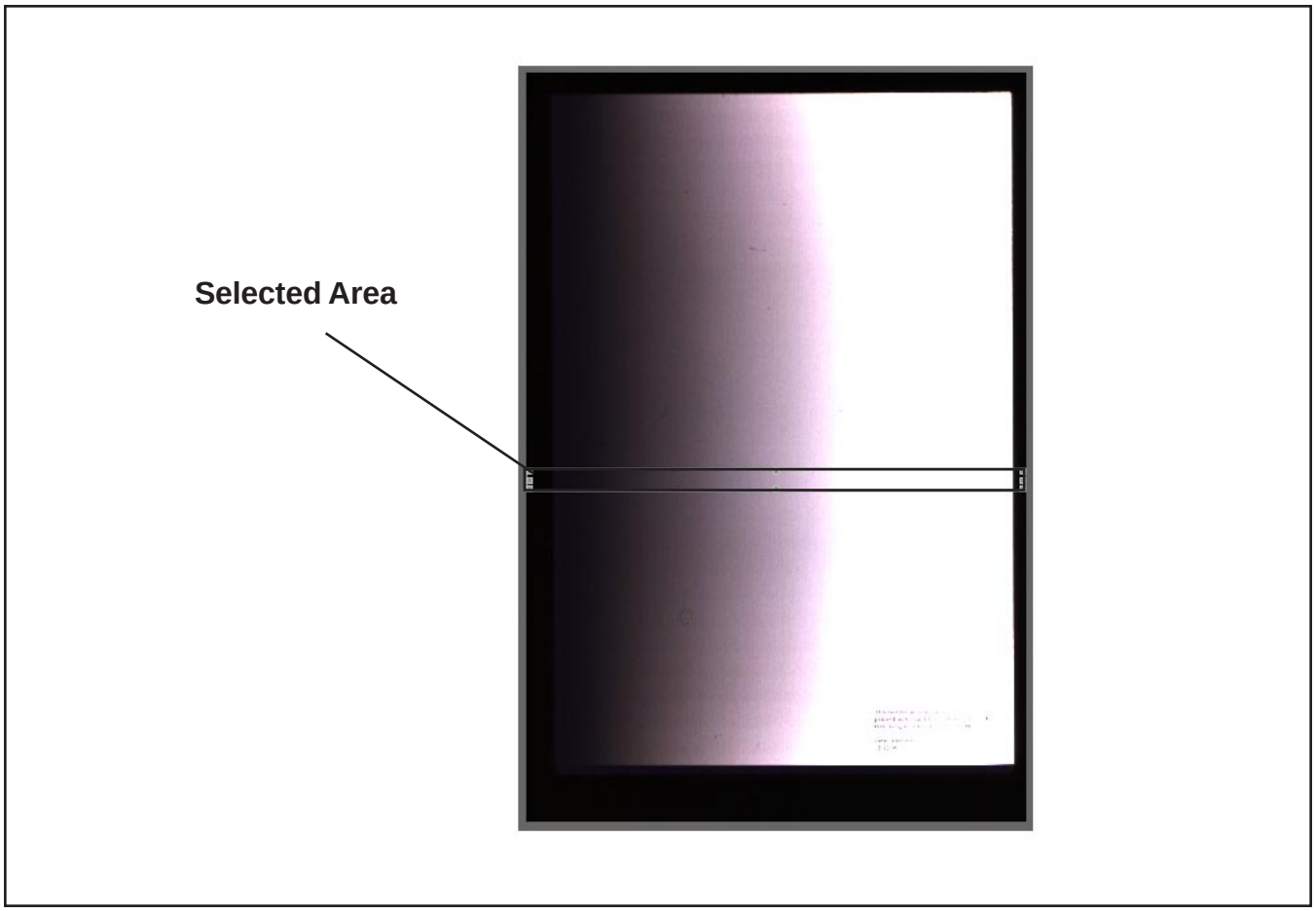


Figure 9. Selected area for scanning

8. Click on the **Scan** button to scan the selected area of the streak target preview image.

9. View the scanned image of the streak target at 1:1 magnification.

   Note: **Scanned streak target image must be magnified to see the vertical streaking.** It may not be evident at lower magnifications.

10. Check the scanned image for streaks. Scroll, in the horizontal direction, across the magnified image of the streak target.

    Note:
    - If the A/D converter is defective, the magnified image shows vertical lines spaced 2 pixels apart. It might also show high levels of noise or contouring.

    - If the A/D converter operates normally, the magnified image shows smooth transitions from black-to-white with no vertical lines.

11. **Normal A/D Converter - No Streaks (Figure 4)**

    Install the slide scanner top cover and then return the slide scanner to the customer or to stock.

12. **Defective A/D Converter - Streaks (Figure 6)**

    Remove and replace the controller PC board.

    Note:
    - Before replacing the controller PC board, check the date code of A/D converter U18 on the replacement controller PC board as explained in the **Checking Date Code of A/D Converter** procedure.
    - After replacing the controller PC board run the LabView test again to make sure the replacement controller PC board passes all tests and then repeat the **A/D Converter Streak Test** procedure.

Parts Availability

Replacement controller PC boards (P/N AA0977A) are available from:

Material Services Department
Polaroid Corporation
201 Burlington Road
Bedford, MA 01730

Please order from normal sources.

POLAROID CORPORATION
Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. 35mm Scan # 97-2
DATE: August, 1997

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **List**

FROM: **Gerald DiBello**

SUBJECT: **Modified CCD Board (SS35 PLUS)**

Background

In order to improve the yield of CCD's manufactured by Polaroid, the CCD has been modified. The key element in the CCD modification is its blue filter portion.

All SS35 Plus slide scanners manufactured beginning July 1997 will include the modified CCD.

Info for Field Service Departments - CCD Board Replacement

New CCD Boards with the modified CCD are available as a replacement part for the repair of slide scanners with a defective CCD Board.

After the CCD Board is replaced in older models of slide scanners, an internal Configuration Code must be changed to accept the replacement CCD Board.

Note: The slide scanner's firmware does not have to be upgraded beyond the current 5.90 version.

The Configuration code is changed:

- Using the latest version (1.02 or, higher) of the LabVIEW IPT software.
- After the installation of the new CCD Board.

For details on how to change the Configuration code, refer to the **CCD Board Replacement** procedure provided with this Product Alert.

The LabVIEW IPT tester software is used to change the Configuration code from its previous value of **0** to a new value of **1** in the slide scanner's EEPROM.

Note: The Configuration code change gives new instructions to the slide scanner allowing it to work correctly with the modified CCD.

Once the Configuration code change is completed, advise the Customer that version 2.7 (or higher) of the application software **must** be used.

Note: Older versions of the application software **will NOT** work correctly with the modified CCD.

Info for Telephone Service Support - CCD Board Replacement

If a Customer reports image quality problems (**Example:** Color changes in scans, especially in blue tones), telephone support should include CCD Configuration code checks in their script.

If it's determined that the slide scanner has the wrong Configuration code for the type of CCD Board installed, it is possible to have the Customer change it.

For details on how to change the Configuration code, refer to the **CCD Board Replacement** procedure provided with this Product Alert.

Some reasons why the Configuration code may be incorrect:

- Configuration code was not changed after a defective CCD Board was replaced with a modified CCD Board.
- Slide scanner has the modified CCD Board installed but it's EEPROM data has been corrupted and it reverted back to the old CCD Configuration code of **0**.

Slide Scanner Identification with Modified CCD

Serial Number Location

The slide scanner serial number (Figure 1) is located in two places:

- On the outside of the original shipping carton (All Configurations)
- Bottom of the slide scanner (Configuration " C " and all subsequent Configurations)

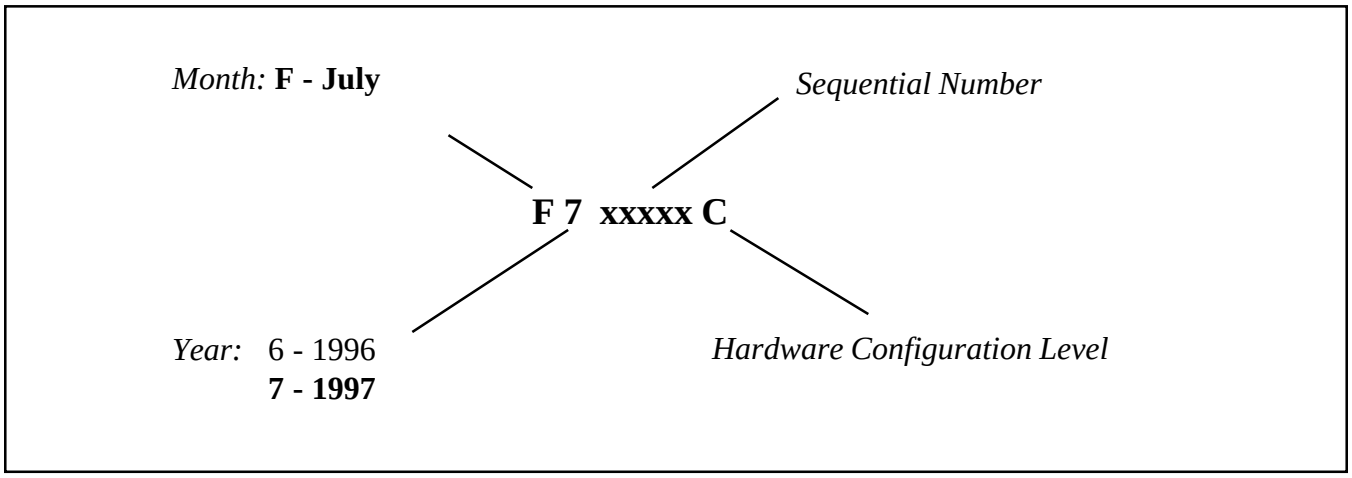


Figure 1. Serial number

Changes to Serial Number with Modified CCD

The configuration letter in the serial number is changed to identify slide scanner's manufactured with the modified blue filter CCD.

SprintScan 35 Plus - Serial number are assigned a hardware configuration level of **C** to identify the CCD change. Slide scanner's with the modified blue filter CCD will start with serial number **F7xxxxxC**.

Modified CCD Board Identification by Markings

Modified CCD Boards can be visually identified as follows:

- Part Number **1AJ012A**
- Blue stripe on end of CCD Board cable connector **J1**.

Note: Blue stripe is visible after removing the top cover of the slide scanner and looking on the left end of the CCD Board (as viewed from the front of the slide scanner).

Modified CCD Board Service Issues

There are service issues that may occur in conjunction with the introduction of the modified CCD Board and the latest application software.

Table 1 lists negative and chrome scanned image problems that can be seen if a mix-up occurs. It also indicates the corrective action to take. Figure 2 shows example scans with modified CCD.

Table 1. Negative and Chrome Scanned Image Problems

Problem	Corrective Action
1. Config 0 (old version) CCD type installed in slide scanner configured for modified Config 1 CCD	Change slide scanner Config code to **0**. **Negatives** - Have undeniable yellow hue **Chromes** - Blues and yellows look flat
2. Config 1 (modified version) CCD type installed in slide scanner configured for old Config 0 CCD	Change slide scanner Config code to **1**. **Negatives** - Have undeniable blue hue **Chromes** - Blues extra saturated
3. Config 1 (modified version) CCD type installed in slide scanner but, incorrect application software installed (version 2.6 or, earlier)	Update to application software to version 2.7. No CCD Configuration data reported by software. **Negatives** - Have undeniable blue hue **Chromes** - Blues extra saturated

CCD Type: 1, CCD Config: 1, no Auto Expose

(Correct Config Code)

CCD Type: 1, CCD Config: 0, no Auto Expose

(Incorrect Config Code)

Figure 2. Examples of scans with modified CCD

Reading and Changing Configuration Code Using Application Software

Note: To change CCD Configuration code, version 2.7 or, higher SprintScan application software **must be installed**.

Conditions that require the CCD Configuration code to be changed are:

- Slide scanner has modified type Config 1 CCD but, incorrectly configured for it.
- Slide scanner does not have modified type Config 1 CCD but, correctly configured for it (Config code set to **1**, should be **0**).

For PC or PC Compatible Computers

Reading CCD Configuration Code

1. Start up PhotoShop or SprintScan Direct application.
2. Check Configuration code under the **Help** menu in the SprintScan 35 Preview window.
3. Select **Help** menu and then choose **Diagnostic**.

   The **Diagnostic** window (Figure 3) appears indicating:

   - Firmware Version
   - CCD Configuration

   Note: The example shown in Figure 3 indicates that a **Config 0** CCD is in a SS35 Plus slide scanner with version 5.90 firmware.

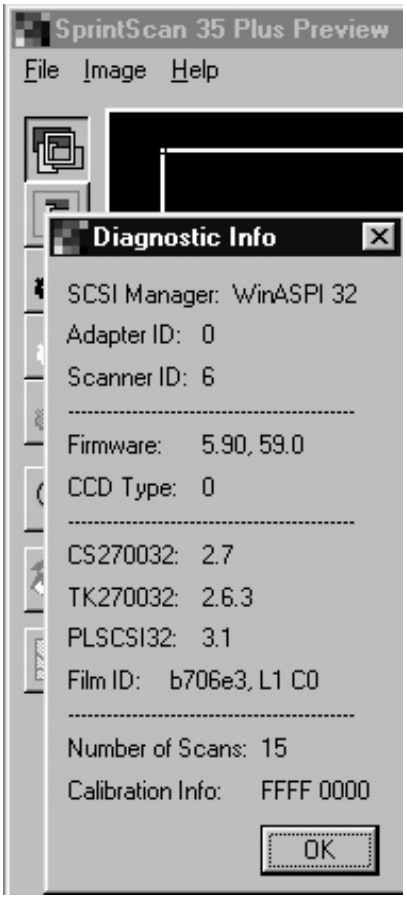


Figure 3. Diagnostic window

Changing CCD Configuration Code

1. Start up Photoshop or SprintScan Direct application.

2. Activate SprintScan Control Panel window.

3. While holding down the **Alt** key, press **B** key on the computer keyboard. Once the warning message dialog box appears about using the Debug function, cancel it.

   The Debug menu choice (Figure 4) appears in the Preview window.

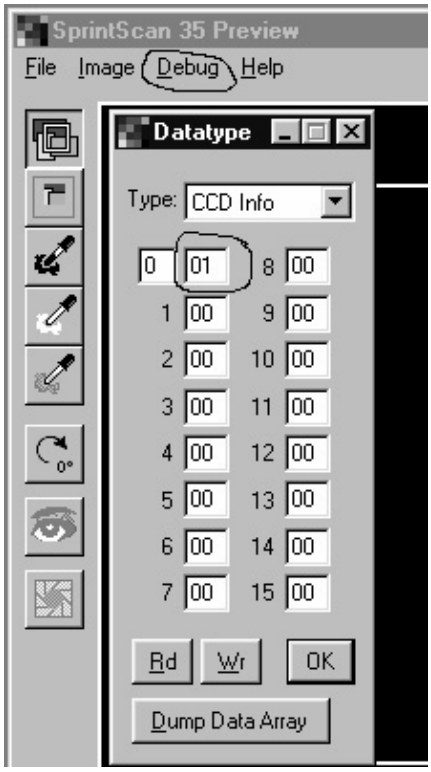


Figure 4. Debug menu

4. Select **Rd/Wr Datatype** from the choices listed in the Debug Menu.

5. When the Datatype window appears, choose **CCD Info** from the pop-up menu at the top of the window. The number appearing in the first column at the top left is the CCD type.

   Note: In the example shown in Figure 4, the CCD reads out as a **1** indicating that this particular slide scanner is configured for the modified CCD.

6. Change the Configuration from 1 to 0 or 0 to 1 by dragging the I - beam cursor through the number that appears and then type in the corrected number.

7. After filling in the Configuration number touch the **Wr** (Write) button with the mouse pointer to send the new Configuration information to the slide scanner EEPROM.

8. Confirm the new Configuration, by touching the **Rd** (Read) button with the mouse pointer.

9. Finally, to correctly view the change in a scanned image **exit** the SprintScan application and then restart the **SprintScan Direct program** or, **Acquire/Import the slide scanner** in PhotoShop.

   Note: A second method is to select any new film type and then re-select the film type desired. Either method re-initializes the slide scanner so you can correctly scan with the changed CCD Configuration setting.

For Mac Computers

Reading CCD Configuration Code

1. Start up PhotoShop and do an Acquire/Import to start the SprintScan application.

2. At the top of the **Apple** menu (top left corner of the screen) choose

“ About SprintScan 35… ”.

The **About** dialog box (Figure 5) appears.

Figure 5. About dialog box

3. The numbers indicated at the right-bottom of the **About** dialog box are: (reading from top to bottom)

   - CCD configuration code (shown as **c0** in this example)
   - firmware version
   - software version

Changing CCD Configuration Code

1. Change configuration number from **0** to **1** or, **1** to **0** by holding down the **Option** key and **single clicking** the mouse pointer while pointing at the configuration number.

   The CCD Programming Dialog box (Figure 6) appears .

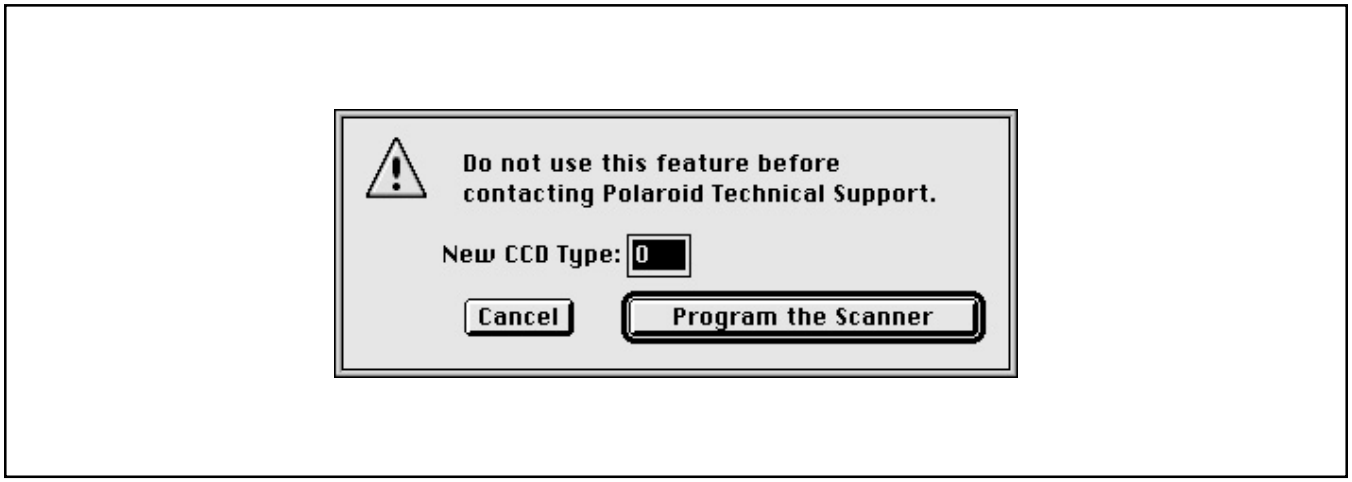


Figure 6. CCD programming dialog box

2. Change the CCD configuration type by typing in the configuration for the CCD that's in the slide scanner (**1** or **0**).

3. After typing in the new **Config** number touch the **Program the Scanner** button with the mouse pointer or, press the **Return** key.

   This action sends the new configuration code to the slide scanner EEPROM.

   Note: To confirm the new Configuration code, select **About Sprintscan 35…** under the Apple menu and then read the new Configuration code.

4. Finally, to correctly view the change in a scanned image you must **exit** the SprintScan application and Acquire/Import the slide scanner in PhotoShop.

   Note: A second method is to select any new film type and then re-select the film type desired. Either method re-initializes the slide scanner so you can correctly scan with the changed CCD Configuration setting.

CCD Board Replacement (Older Slide Scanners)

If the CCD board fails in an older SprintScan 35 Plus, replace it with a modified blue filter CCD Board as follows:

1. Make sure that the firmware in the slide scanner is version 5.90 or, higher.

2. Replace the defective CCD Board as explained in the SprintScan 35 Repair Manual.

   Note: Stop at the step where the LabVIEW IPT tester is used to test the slide scanner.

3. After starting the LabVIEW IPT tester, (version 1.02 or, higher) make the applicable change to the normal test setup.

   Note: On the main LabVIEW window is a selection box marked **CCD Configuration**. Up to this point you have been instructed to set the option in this box to **Do Not Update** (Figure 7).

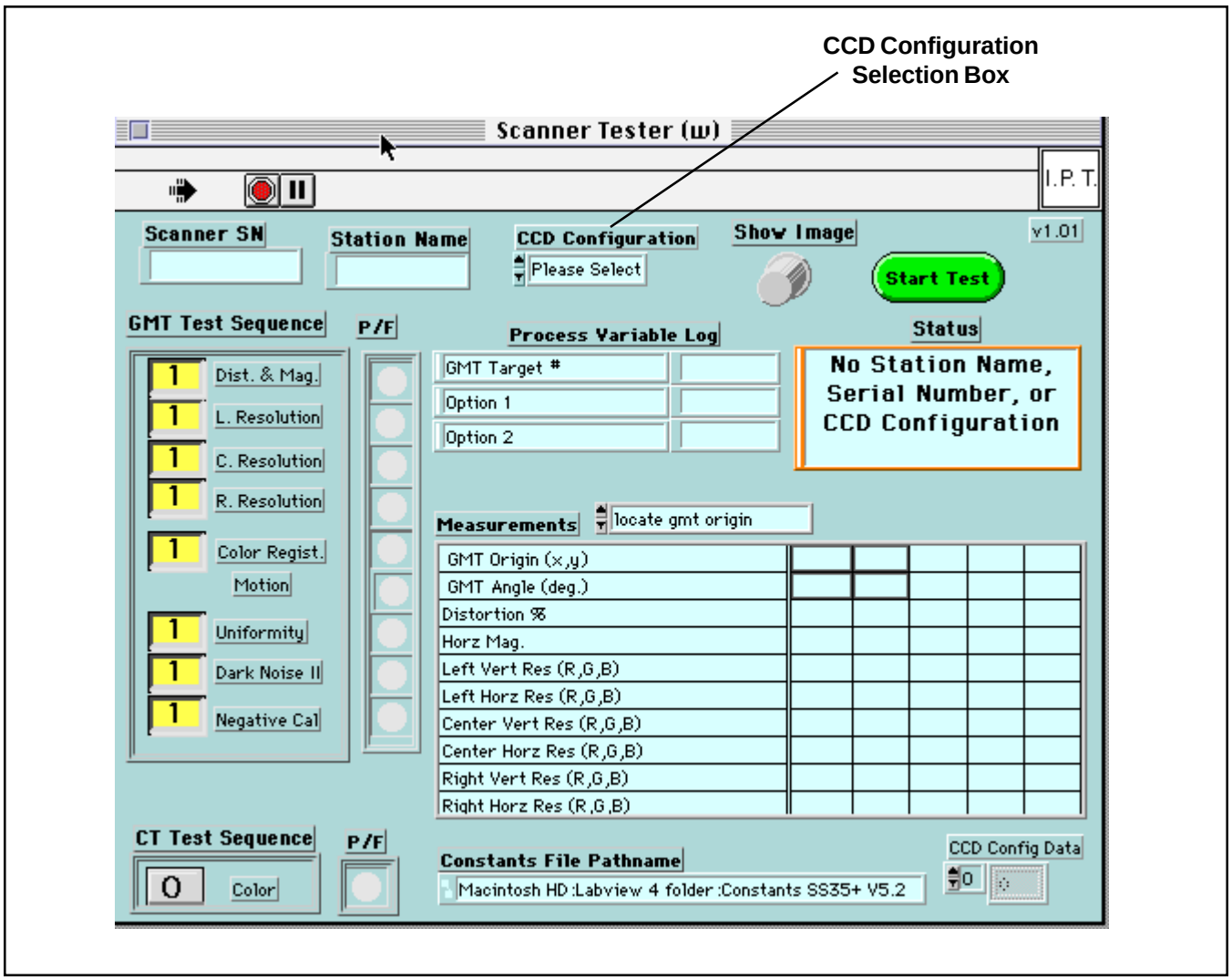


Figure 7. Scanner tester (w) panel

4. Change selection to **CCD Config 1** (Figure 8a)

   As the LabVIEW test runs, the configuration data in the slide scanner EEPROM will be changed to operate correctly with the modified CCD.

   After the LabVIEW test is completed, the new configuration will be reported at the bottom right corner of the scanner test panel as **CCD Configuration**. This window should read **1** (Figure 8b).

   Note: The Configuration code only needs to be changed once. On subsequent runs of the LabVIEW IPT tester, leave the CCD Configuration selection at **Do Not Update**.

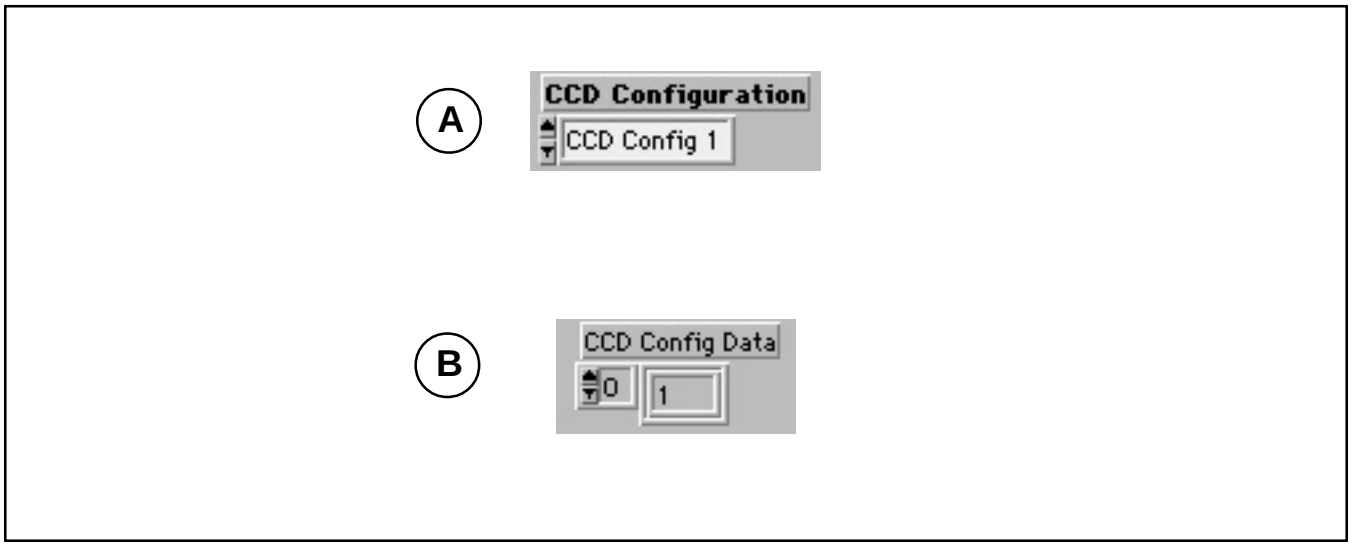


Figure 8. CCD config widow

Parts Availability

Replacement CCD Boards (P/N **1AJ012A**) for the SprintScan 35 Plus are available from:

Material Services Department
Polaroid Corporation
201 Burlington Road
Bedford, MA 01730

Please order from normal sources.

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
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☐ **SPECIAL**

P.A. NO. 35mm Scan # 97-3
DATE: August, 1997

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: Gerald DiBello

SUBJECT: SPRINTSCAN 35, 35ES & 35PLUS SCSI TERMINATION POWER

Revision
Replaces Product Alert 35mm Scan # 95-3: June 1995

Problem

Macintosh Laptops

Slide scanner malfunctions have taken place when a laptop computer (PowerBook) was connected to it. The type of malfunction that took place was a " Scanner Hardware Error ". This type of error prevents the slide scanner from :

- Properly performing its self-test routine
- Finding its analog range

Investigation found that a blown SCSI interface fuse on the main controller PC board caused the error.

Since laptop computers do not provide termination power, the slide scanner's external SCSI terminator dragged the SCSI signals to ground prohibiting the laptop computer from properly communicating with its hard drive.

Other Computers

In some cases, a blown term power fuse can cause SCSI communication failures. Error messages for this type of problem can vary.

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P. A. NO. 35mm Scan # 97-4
DATE: December, 1997

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **Gerald DiBello**

SUBJECT: **Horizontal Color Banding at Very Bottom of Scanned Image**

Background

Typical Customer Complaint

When scanning in the Portrait or the Superslide mode horizontal color banding occurs at the very bottom of the scanned image.

Note: This problem does not occur in the Landscape mode.

Slide Scanners Affected

- SS35 ES and PolaScan 35 with light tunnel.
- SS35 Plus, PolaScan 35 Plus.

Note: This problem does not affect slide scanners with an older style filter wheel.

Problem

Due to a manufacturing problem, some light tunnels were improperly installed. The left side of the slide carriage arm, as viewed from the top of the slide scanner with its front facing forward, can interfere with the right front side of the light tunnel. If this occurs, color registration will be affected because scan speed is effectively lowered. The point of the interference is shown in Figure 1.

For correct alignment, the light tunnel must be installed so that it's front is exactly parallel and spaced 1mm away from the bottom of the slide carriage when it is in its resting position (not scanning).

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P. A. NO. 35mm Scan # 97-5
DATE: December, 1997

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **Gerald DiBello**

SUBJECT: **Manufacturing Changes to SS35 LE**

Background

The following manufacturing changes were made to the SS35 LE at the beginning of October 1997:

- Firmware Revision Level
- Power Supply Vendor

Table 1 indicates the problems corrected by the changes made to the SS35 LE.

Table 1. Problems Corrected by Changes

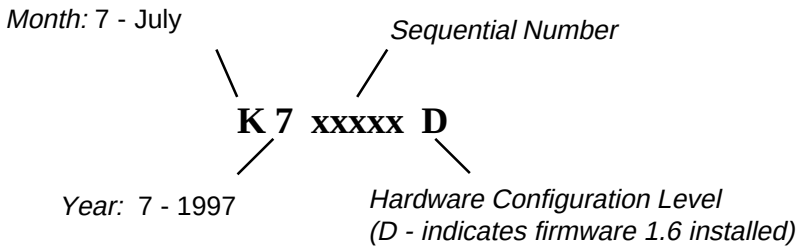
Change	Problems Corrected
Firmware - Updated from version 1.4 to 1.6. **Note:** Firmware 1.5 produced but never shipped with any SS35 LE Slide Scanners.	• Prevents horizontal white lines from appearing in final scan when Agfa XRG 100 negative film type is selected and user scans at less than full resolution (1950dpi). • Prevents vertical white lines, at times, from appearing in the upper right hand corner of the scanned image.
Power Supply	Changed Vendor (TDK to Kentex).

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

Serial Number Identification and location

Identification

The slide scanner serial number begins at **K7 XXXXX D** (**X** is a number from **0** to **9**, **D** indicates firmware revision 1.6 installed.



Location (Figure 2)

The Serial Number is located:

- On the outside of the shipping carton
- Bottom of the slide scanner

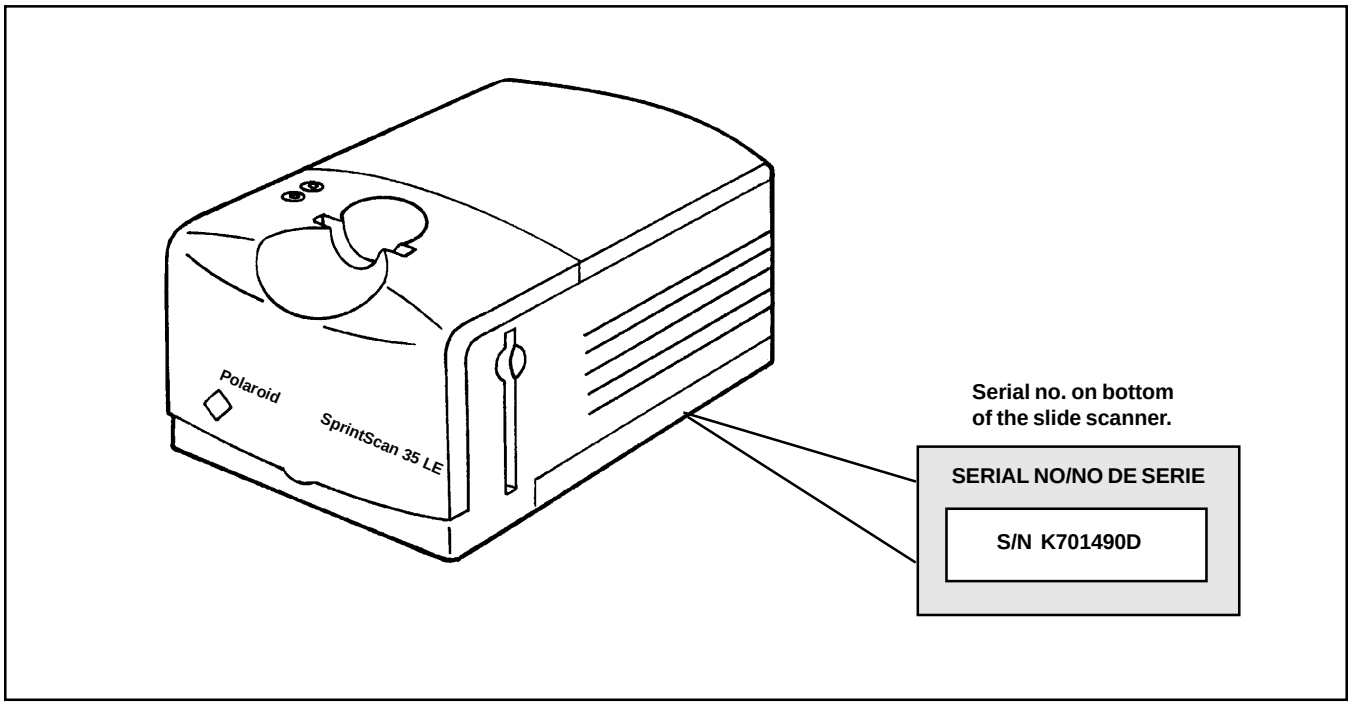


Figure 2. Serial number location

Alignment Procedure

Note: The following procedure should only be performed by Polaroid authorized service centers that have been trained on this product.

1. Turn the slide scanner power off and then remove the power cord.

2. Remove the lamp.

3. Remove the slide scanner top cover.

4. Loosen the two (2) light tunnel hold-down screws that secures it in place.

5. Re-position the light tunnel so it is spaced approximately 1mm away from the slide carrier and then re-tighten the two (2) light tunnel hold-down screws.

6. Manually rotate the leadscrew so the slide carrier moves down until the arm is next to the right side of the light tunnel.

7. Make sure there is clearance between the light tunnel and the slide carrier arm.

8. Re-assemble the slide scanner and then re-test it's operation in the Portrait or the Superslide mode.

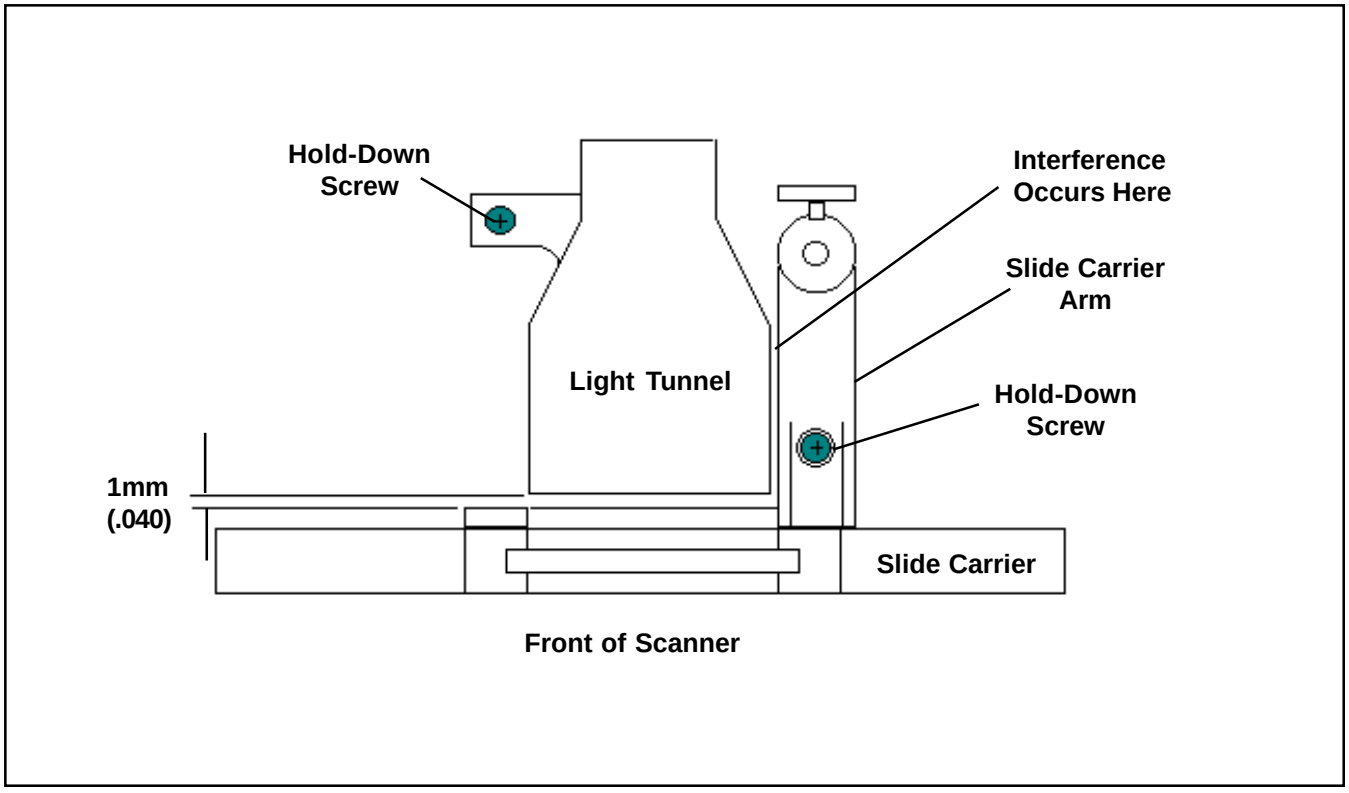


Figure 1. Partial Top View of SprintScan or PolaScan Slide Carriage Assembly.

Checking for Blown SCSI Interface Fuse

Equipment Required

- SCSI Interface Fuse P/N 5N0008001
- Passive Terminator, 50-Pin Centronic P/N 1E5543A or equivalent

1. Turn off the scanner by setting its Power On/Off (**1/0**) switch to Off (**0**).

> **WARNING**
>
> - **When turning on the system always make sure that the slide scanner is turned on first and then the host computer.**
> - **When turning off the system its the opposite - always turn off the host computer first and then the slide scanner.**

2. Disconnect host computer from the SCSI interface connector.

   Notes:
   - Do not disconnect SCSI terminator.
   - If the slide scanner you are testing is a SS35 Plus, set the terminator switch to its OFF position and leave it off while doing this test. **Connect an external SCSI terminator to its Centronics type 50-pin connector.**

3. Turn on the slide scanner by setting its Power On/Off (**1/0**) switch to On (**1**). The green **Power** LED lights to indicate that the slide scanner is turned on.

4. During power-up, the slide scanner initiates its self-test routine. The yellow **Ready** LED is off while the slide scanner cycles through its self-test routine.

5. Upon completion, the transporter returns to its home position and the yellow **Ready** LED lights steady to indicate that the slide scanner is ready to operate.

   - If the yellow **Ready** LED comes on or, continually blinks the SCSI interface fuse is OK.
   - If the yellow **Ready** LED is dim (under most lighting conditions it will look like it is "**off**"), the SCSI interface fuse is blown . Replace SCSI interface fuse as explained in the provided replacement procedure.

Replacing SCSI Interface Fuse

CAUTION

The SCSI fuse is soldered to the main controller PC board. The main controller PC board is particularly sensitive to static discharges. Be sure to use an anti-static mat and wrist strap during this procedure.

1. Remove the top housing as explained in Section 4 of the Slide Scanner Repair Manual.
2. Unsolder the SCSI interface fuse (Figure 1) and then replace it with a new one.

   Notes:
   - When replacing it be very careful not to damage the main controller PC board.
   - Fuse Rating - 1.0A Fast Action/Surface Mount
   - Fuse Part Number - 5N0008001

3. Re-install the top housing as explained Section 4 of the Slide Scanner Repair Manual.

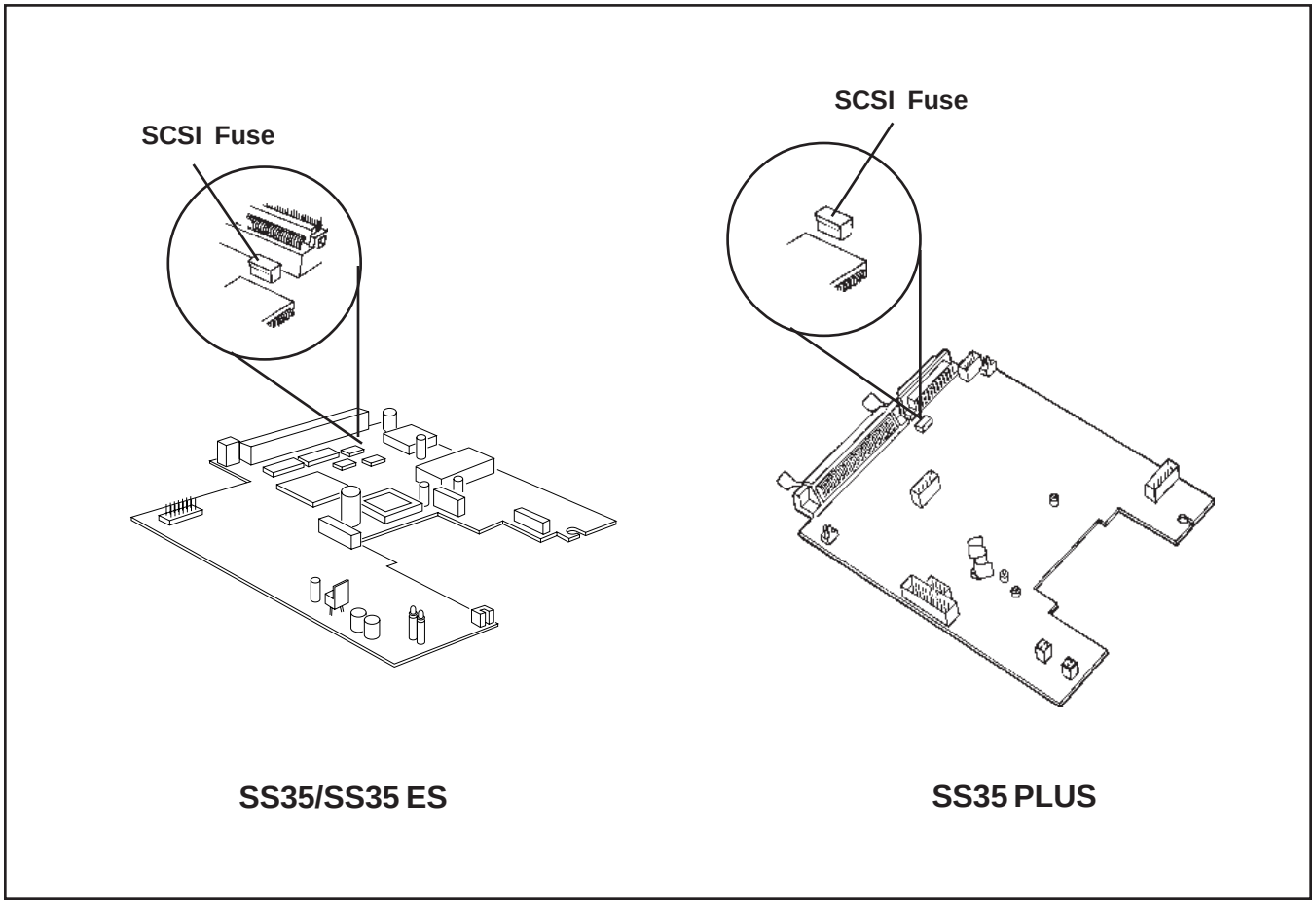


Figure 1. Replacing SCSI Interface Fuse on Main Controller PC Board

Parts Availability

Fuse 5N0008001 and Terminator 1E5543A are available from:

Material Services Department
Polaroid Corporation
201 Burlington Road
Bedford, MA 01730

Please order from normal sources.

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

REPAIR INFO BULLETIN

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

R.I.B. NO. 35 mm Scan # 96-1
DATE: March 1, 1996

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: JIM FEE

SUBJECT: CCD FILTER TEST

Purpose

To verify that the CCD filter functions correctly. (**If it functions incorrectly, vertical, grey bands will be visible across the entire image.**)

Required Materials and Software

- Test slide (horizontal color bars - multi-color bar, 13638 and magenta test target, 13639)
- Sample images scanned with defective filter (on diskette)
- Adobe PhotoShop (MAC version)
- SprintScan 35 plug-in

Filter Test Procedure

1. Scan the test slide using the following parameters:

   - Area of Interest - All color bars (red through magenta)
   - Film Table - Fuji Super 6 400
   - Auto Exposure - OFF
   - All other Settings - OFF

2. At a magnification of 1:4, examine the entire image for vertical, grey bands while viewing:

   - R, G, B
   - R color plane only
   - G color plane only
   - B color plane only

3. Repeat step 2 at a magnification of 1:1, scrolling horizontally across the entire image.

   Note: If vertical, grey bands are visible in steps 2 and 3, the CCD filter is faulty. Replace the CCD PC Board.

4. If the CCD PC Board is replaced, repeat this procedure to verify that the CCD filter is OK.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. MCAM #94-2
DATE: APRIL 8, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: H. LIMBO

SUBJECT: INTERMITTENT FAILURES OF MICROCAM REMOTE BUTTON

The Vale of Leven manufacturing facility has identified an intermittent failure problem with the Remote Button Assembly (#1D3405A) of some MicroCam microscope cameras. These failures have been limited to MicroCams with serial numbers between B4445C and C4050C. Manufacturing estimates that approximately 3% of MicroCams with serial numbers falling in the noted range may have this problem.

The suspect MicroCams are identified as follows:

PID #	LOT #	QTY	CUSTOMER
618089	008	42	Japan
618089	009	64	Enschede
618089	011	64	Enschede
618910	002	64	USA
618910	003	64	USA

Vale of Leven Manufacturing has developed a repair procedure which has been distributed to appropriate facilities. If you receive any defective units, forward them to Enschede or Oak Brook for repair.

If you have any quesitons concerning this Product Alert, please call Stephen McGrogan at 240-2615 or Harro Limbo at 221-4424.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. MCAM #94-3
DATE: APRIL 15, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **H. LIMBO**

SUBJECT: **LOCATION OF SERIAL NUMBER ON MICROCAM**

Depending on the date of manufacture, the serial number of the MicroCam can be located in two different places. On units manufactured before June 1993, the serial number is located on the CB-33 Door Assembly (P/N 761143B). On MicroCams manufactured in June or later, the serial number was relocated to the inside of the MicroCam Main Housing (P/N 1D3427A) adjacent to the CB-33 Main Frame. In order to read the latter serial number the film cartridge must be removed.

Do not confuse the CB-33 serial number with the MicroCam serial number. The CB-33 serial number is located in the FRONTof the film cartridge compartment, on the CB-33 main-frame. It has 7 or 8 characters and begins with one or two letters. For example,

J3340GR or BA90351G.

The MicroCam serial number is located in the BACK of the film cartridge compartment and, it currently consists of six characters. For example,

B4445C.

The serial number was relocated so that the identity of the MicroCam would not be lost in the event the entire CB-33 camera back or it's door assembly was replaced.

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. MCAM #94-4

DATE: NOVEMBER 14, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: HARRO LIMBO

SUBJECT: MICROCAM DOUBLE IMAGE PROBLEM

PROBLEM

A double image problem has been identified with MicroCams manufactured from late March 1994 through August 1994. Serial numbers encompass **C4460*** to **J4000C.**

The problem is estimated to affect 10% of the approximately 4000 units manufactured during this period. (If you are on Lotus Notes, see Service Work Order #HE940919100829 for a history of this problem.)

SOURCE OF PROBLEM

A *defective 80C Color Conversion Filter* is the cause of the problem. This Filter converts 3400° K light to 5500° K, for which the T-339 Film is balanced.

Depending on the total exposure time, the MicroCam logic varies the length of time the 80C Filter is used during the exposure. When the exposure is *less than one second*, the Filter is in place for the entire time and no double image problem should occur. If the exposure is *longer than nine seconds*, the 80C Filter is not used at all — thus no double image problem here as well. But for exposure times in the one to nine second range, the double image problem occurs, peaking when the Filter is used for 50% of the total exposure time, occurring in the four to six second range. (There is no problem, of course, when T-331 or T-337 settings are used.)

(Cont'd.)

ACTION TAKEN

All MicroCam inventories, worldwide, have been placed on hold (Corporate Hold Document issued on 10/26/94 by S. McGrogan). A procedure has been provided to the subsidiaries for screening these units. All defective units are to be returned to the Vale of Leven Manufacturing group, attention of Steve McGrogan.

If a customer's unit is found to have this defect, the Shutter Base Assembly (part number 1D3430A) must be replaced. If you are on Lotus Notes, refer to Work Order #HE940919100829 for a history of this problem.

QUESTIONS

If you have any questions regarding this problem, please contact one of the following:

Harro Limbo at 784MD-2B in Cambridge, Massachusetts at PTN 221-4424

Kim Wyman at 565TS-8M in Cambridge, Massachusetts at PTN 226-6011

Stephen McGrogan at Vale of Leven, Scotland at PTN 240-2378

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. DIGPAL #94-5A

DATE: DECEMBER 9, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **NICK CURRERI**

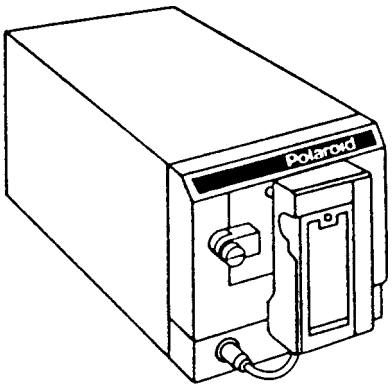
SUBJECT: **NEW HR-6000 HIGH-RESOLUTION DIGITAL PALETTE**

PERFORMANCE DESCRIPTION

A new high-resolution Digital Palette Color Film Recorder for creating professional-quality 35mm slides, prints and chromes in minutes from personal computers and workstations has recently been introduced by Polaroid.

The new HR 6000 (PID #619282)shown at right contains enhanced Polaroid optics, a high-precision 3" CRT and dynamic focus circuitry which produces 4000-line resolution slides which are sharp out to the edges and corners.

The HR 6000 reproduces up to 24-bit color images using a proprietary, internal 33-bit color exposure process delivering smooth ramped backgrounds with up to 16.7 million colors.



New HR 6000 High-Resolution Digital Palette Color Film Recorder

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

FEATURES

The new HR 6000 Digital Palette, for both IBM and Macintosh computers, can utilize more than 20 types of film.

It can be equipped with camera backs for the following films:

- o 35mm
- o $3^1/_4$ x $4^1/_4$ pack film
- o 3 x 4 AutoFilm
- o 4 x 5 pack film
- o Bulk film back from third party source

COMPATIBILITY

The HR 6000 is a universal color film recorder for both IBM and Macintosh computers. On both platforms, it supports networking with Zenographics SuperPrint for the Digital Palette for Windows; Graphx RasterPlus P/S for DOS/Windows; and Digital Palette software for Macintosh.

WARRANTY

The HR 6000 Digital Palette is warranted for one year from date of purchase by original user. Warranty extension in the form of service contracts will be available. Contract types and periods will be described in a later bulletin.

SERVICE (U.S.A.)

The HR 6000 is the latest addition to the CI-3000/CI-5000 product line and as such, will have the same repair policies and technical assistance provisions.
An Early Returns Program operating in the first few months following product introduction will analyze defective units returned to 784 Memorial Drive in Cambridge. Analysis will compare defects to performance standards, estimated failure rates and reliability standards, in an effort to identify and isolate deviations, address customer comments and questions, and devise effective solutions. Early Returns findings will be reported to you.

In-Warranty: If a unit requires service, the customer will be asked to call the Polaroid Resource Center (1 800 432-5355). If it is determined that the unit needs to be serviced, the customer should ship it insured and prepaid to Polaroid Corp., ATTN Industrial Repair, 2020 Swift Drive, Oak Brook, IL 60521. The unit will be repaired or exchanged and returned to the customer within five working days.

Out-of-Warranty: Same, except customer pays for parts and labor.

Documentation: An HR 6000 Parts Catalog and Addendum to the CI-5000 Service Manual will be available in November, 1994.

SERVICE (Non-U.S.A.)

Each Subsidiary will establish its own service support strategy.

PARTS AVAILABILITY

Most HR 6000 parts are the same as those used in the CI-5000 Palette.

A Product Alert listing unique HR 6000 parts and their availability will be published in November 1994.

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

REPAIR INFO BULLETIN

Int'l ☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

R.I.B. NO. Dig Pal #95-6
DATE: February 1, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **NICK CURRERI**

SUBJECT: **UPGRADING THE HR-6000 TO "B' CONFIGURATION**

BACKGROUND

Problems with HR-6000 CRT's combined with luminance stability problems have led to needed design changes. All HR-6000 **"A"** type configurations that are returned from the field **must** be upgraded to a **"B"** type configuration.

Table 1 shows the two HR-6000 configurations and their differences.

Table 1. HR-6000 Configurations

	Configuration "A"	**Configuration "B"**
Firmware Version	5.05	5.06
Monitor PC Board	Original 01 PCB	Reworked to 02 PCB
CRT	Old Phosphor	Old Phosphor
CRT Clamp Adjustment	120 oz-in	120 oz-in
Adjustments		
Luma	Same as CI-3000/5000	R18 - 6.0 ft-l @ 150
AutoLuma	Same as CI-3000/5000	VR1 - 200 @ 6.0 ft-l
Dark Current	Same as CI-3000/5000	Same as CI-3000/5000

Table 2 lists and describes the upgrades to **"B"** from **"A"** configurations.

Table 2. HR-6000 Upgrades

	Upgrade	Description	Function
Firmware	5.06	Includes 5.06 changes for autoluma. Change **E-PROM** to version 5.06	Eliminates saturated photocell autoluma errors (bug).
Monitor PC Board	Reworked to issue 02	Set potentiometer R29 to 270 K ohms. Set potentiometer R55 to zero (0) ohms. Change resistor R34 to 1.3 M ohms.	Optimizes autoluma dynamic range. **Note:** In conjunction with firmware, provides more capability for CRT's that drift up and down.
Autoluma Calibration	Monitor PC Board	Set R18 luminant to 6.0 ft - l @ 150.	Provides better range capability to accommodate varying monitor luminance.
	Logic PC Board	Set VR1 autoluma to 200 @ 6.0 ft - l.	

The following paragraphs describe how to upgrade the monitor PC board and how to re-calibrate the autoluminant function.

MONITOR PC BOARD UPGRADE (Refer to Figure 1)

1. Turn off and unplug the HR6000 Digital Palette Film Recorder.

2. Remove the cover.

3. Remove the paper guard from the rear of the monitor PC board (Figure 1).

4. Using an ohmmeter, set potentiometers:

   - **R29** to 270 K ohms
   - **R55** to zero (0) ohms

5. Using a soldering iron and a solder sucker, remove existing resistor **R34** and replace with new resistor **R34** which has a value of 1.3 M ohms.

6. Replace the **EPROM** with version **5.06**.

   Note: These changes will optimize the autoluma dynamic range. In conjunction with the firmware, will provide more capability for the CRT's that drift up or down.

7. Plug in and turn on the HR6000 Digital Palette Film Recorder.

8. Re-adjust autoluminance to the new autoluma calibration specifications as described below.

AUTOLUMINANT ADJUSTMENT

The autoluminant adjustment for the HR6000 Digital Palette Film Recorder is identical to the CI3000/CI5000 Digital Palette Film Recorder except for the following:

Specification	Adjustment/Location
6 ft - l @ 150	R18 - Monitor PC Board
200 @ 6 ft - l	VR1 - Logic PC Board

Note: Refer to the autoluminant adjustment procedure in Section 5 of the CI3000/CI5000 Service Manual for the steps necessary to adjust the HR6000 autoluminant.

CRT CLAMP REPLACEMENT

Always us a new clamp assembly (PN 1A7065A) if a CRT is removed or replaced. Torque the new clamp assembly as follows:

CI3000/CI5000	HR6000
96 oz - in	120 oz-in

NOTES

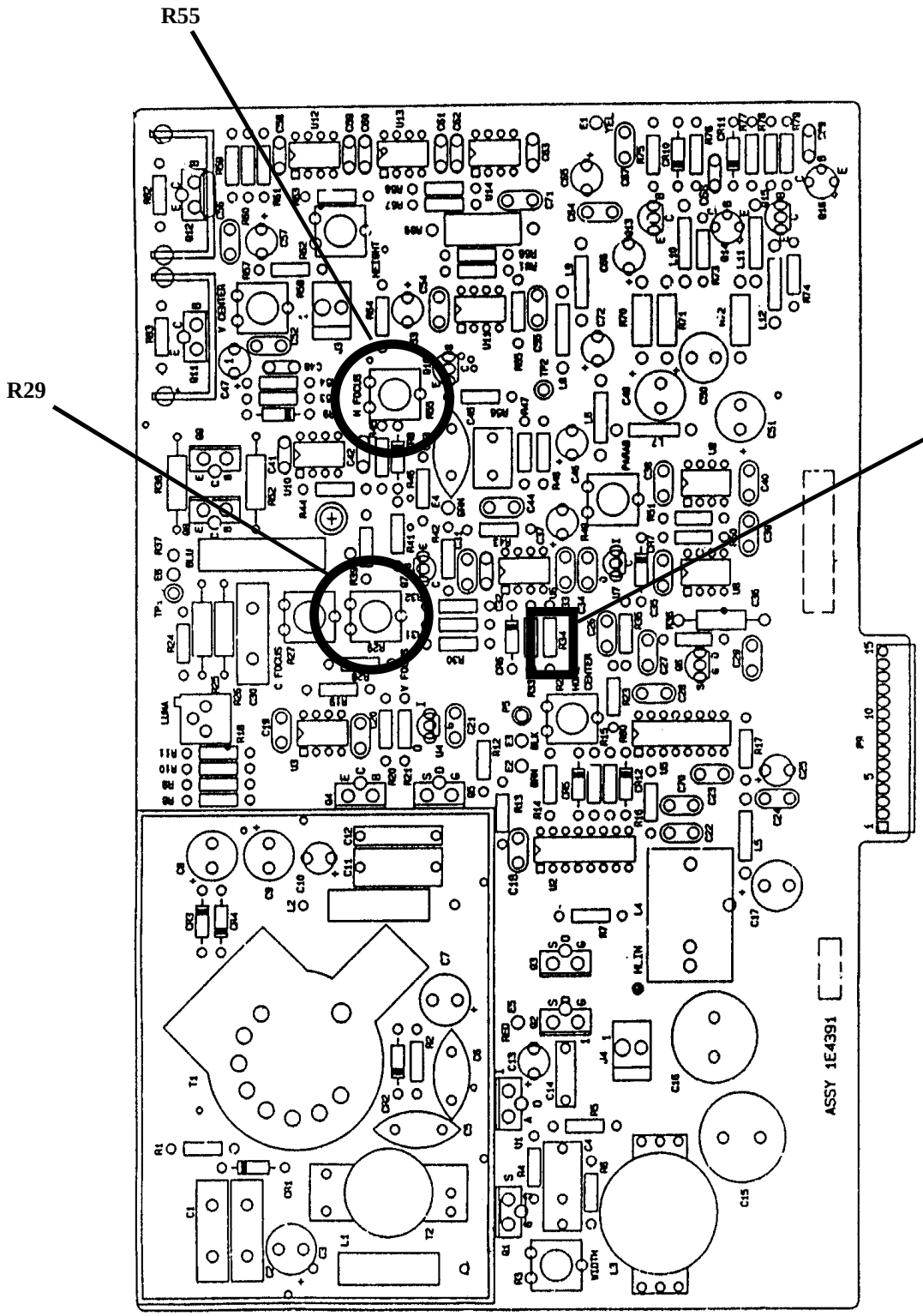


Figure 1. Monitor PC board

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. HR-6000 # 95-1

DATE: January 3, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: NICK CURRERI

SUBJECT: HR-6000 CONFIGURATION CHANGES

The HR-6000 was produced in one configuration - Configuration "A". However, problems with the CRT's and with luminance stability produced the need for design changes, leading to Configuration "B". These changes are described in bulletin DIG PAL #95-6

As these changes were being phased in , an unexpected change in phosphor lots by the CRT manufacturer, CRT Scientific, created the need for more redesign. Examination of samples of the new CRT's showed red spectral transmission to be about 16% higher than before. This forced another firmware change to better match the film tables to the new CRT's. Accordingly, there are now three HR-6000 configurations. Their differences are shown below in Table 1.

Table 1. HR-6000 Configurations

	Configuration "A"	**Configuration "B"**	**Configuration "D"**
Firmware Version	5.05	5.08	5.09
Monitor PC Board	Original 01 PCB	Reworked to 02 PCB	Reworked to 02 PCB
CRT	Old Phosphor	Old Phosphor	New Phosphor
CRT Clamp Adjustment	120 oz-in	120 oz-in	120 oz-in
Adjustments			
Luma	Same as CI-3000/5000	R18 - 6.0 ft-l @ 150	R18 - 6.0 ft-l @ 150
AutoLuma	Same as CI-3000/5000	VR1 - 200 @ 6.0 ft-l	VR1 - 200 @ 6.0 ft-l
Dark Current	Same as CI-3000/5000	Same as CI-3000/5000	Same as CI-3000/5000

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

IDENTIFYING NEW PHOSPHOR CRT FOR CONFIGURATION " D "

CRT - CRT Scientific Label (Serial number 2000 or greater located on the right side of the CRT).

(Figure 1)

Yoke - Syntronic Instruments Label (Suffix letter **P** located on top of the white plastic cover). (Figure 1)

Monitor PC Board - Wells Gardner Label (Issue 02 located below the heat shield and under capacitors C15 and C16). (Figure 2)

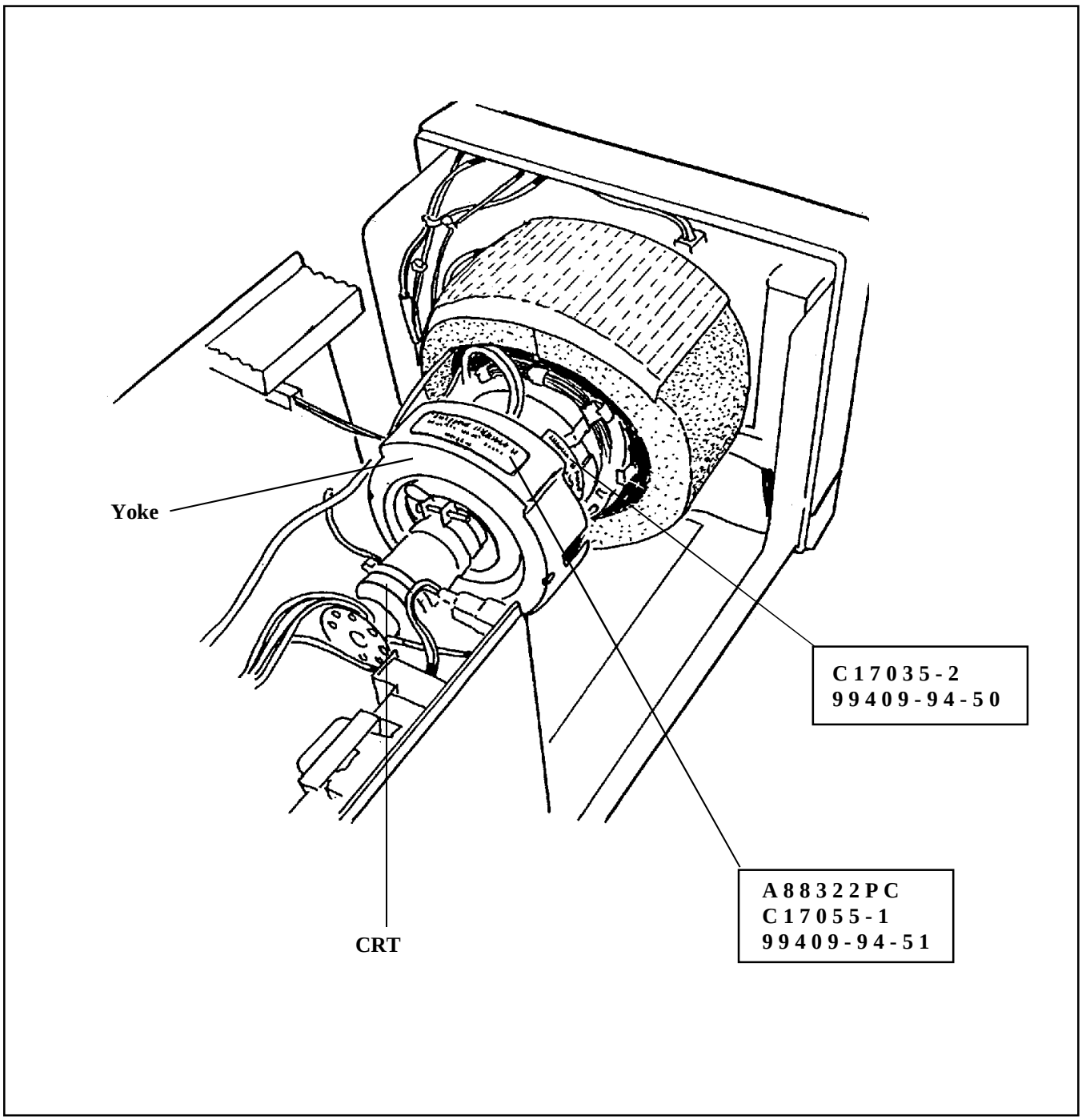


Figure 1. CRT

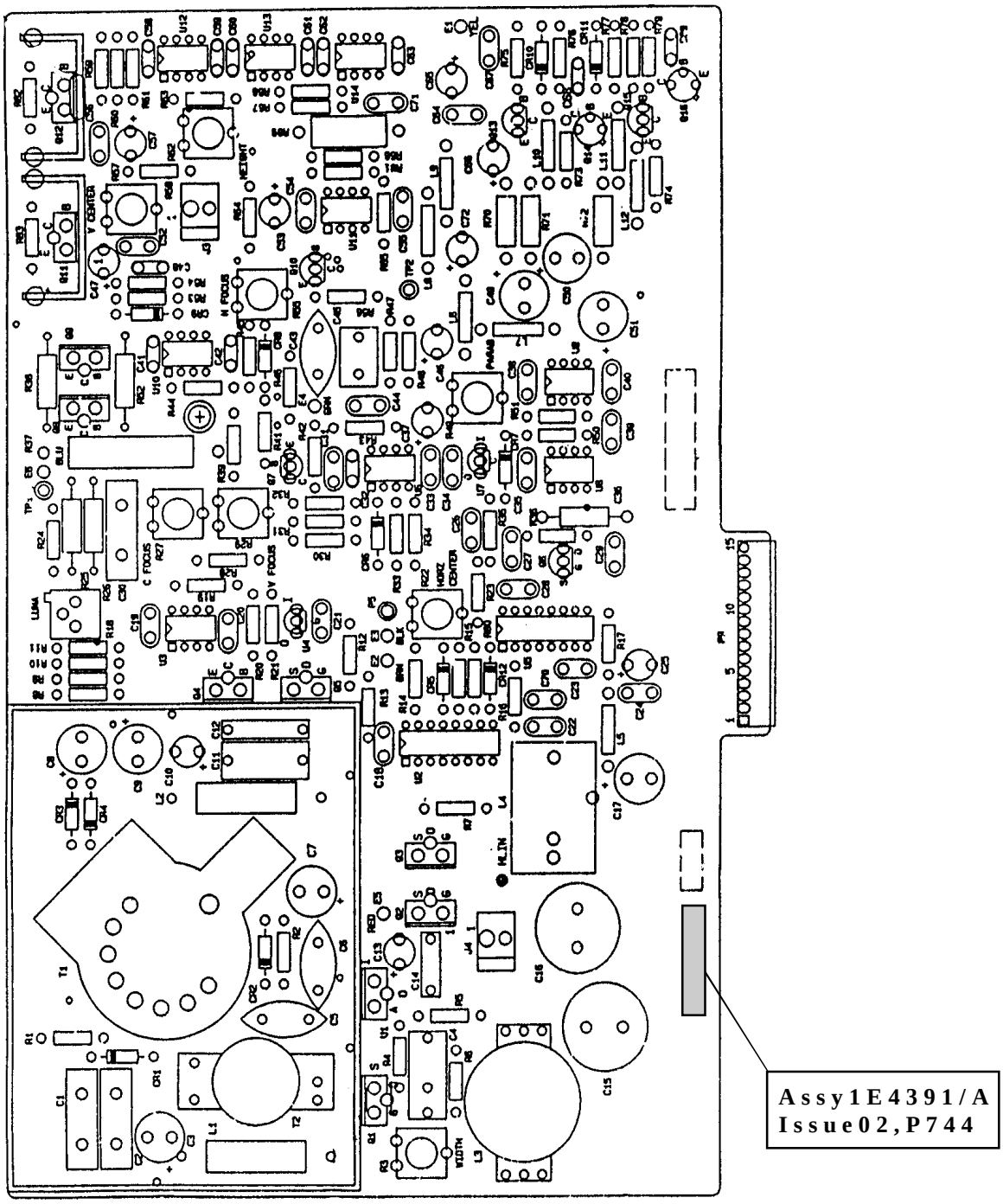


Figure 2. Issue 02 Monitor PC Board Identification

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. Dig Pal #95-8

DATE: October 30, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: ARVIN ARVIND

SUBJECT: USER MANUALS FOR CI3000/CI5000/HR6000 DIGITAL PALETTES

User Manuals for the Digital Palette Color Film Recorder line are now available through Material Services in Bedford, Massachusetts. The table below shows the part numbers of each of these manuals.

Please make the necessary pen and ink additions to your copy of the Digital Palette Film Recorder - CI3000/CI5000 and HR6000 Parts Catalog, dated January 1995.

Part No.	Part Description
1E0529A	HR6000, CI5000S, CI3000S Digital Film Recorders Hardware Manual
1E0528A	HR6000, CI5000S, CI3000S Digital Film Recorders DOS Software Manual
1E0527A	HR6000, CI5000S Digital Film Recorders Macintosh Softare Manual

Please order these manuals through normal sources.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

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TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. Dig Pal #95-9

DATE: October 30, 1995

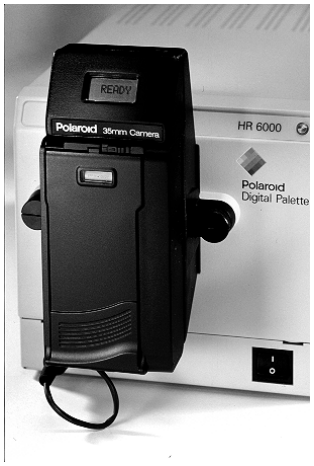
TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: ARVIN ARVIND

SUBJECT: INTRODUCTION OF NEW 35MM CAMERA BACKS/ADAPTORS FOR DIGITAL PALETTE LINE



New 35mm Camera Back/Adaptor
Mounted on Digital Palette

INTRODUCTION:

Effective October 1995, Polaroid is shipping a new automated 35mm camera back/adaptor with HR6000 and CI-5000S Digital Palettes. The camera back/adaptorss are designated R6000 and R5000. (The R5000 camera back is also compatible with the CI3000S models.) As with previous camera backs, the new camera allows the user to photograph an image displayed by the Digital Palette Film Recorder. However, the new camera increases productivity through features that provide convenience and enhanced error protection. The 35mm camera back/ adaptor consists of a lens, a shutter, a logic board that controls the camera and also controls communication between the camera and the Palette, and mounting interface hardware.

Unlike its predecessors the new 35mm camera back/adaptor automatically loads and counts each frame, operating only when the film is properly loaded. It also recognizes film speed through DX encoding, displaying this information on a liquid crystal display. The display also communicates recorder status information including film speed, number of frames remaining, and error messages. The camera back uses a variety of 35mm film.

Since the image displayed by the Digital Palette is a fixed distance from the camera, there is no need to focus. The Palette supplies electrical power to the camera back and controls the exposing of the film. A pair of thumb screws secure the camera back to the Palette.

The following are the PID numbers for the respective units:

PID #	CAMERA BACK/ ADAPTOR
620235 620236	R6000 R5000

AVAILABILITY:

The R6000 and R5000 camera back/adaptors are available as finished goods items.

SERVICE POLICY:

US:

If customers have problems with the camera back/adaptor, the film recorder User Manual instructs them to call the Polaroid Technical Assistance Hotline (1.800. 432.5355, Mon. - Fri., 8 AM - 8 PM EST). If the Technical Assistance Representative determines remedial actions over the phone cannot resolve the problem, the customer will be instructed to return the defective R6000 /R5000 camera back/adaptor prepaid and insured in the original or comparable packaging to:

Polaroid Industrial Repair
2020 Swift Drive
Oak Brook, IL 60521
Attention: Industrial Repair

Non-US:

Customers outside the U.S., must contact the nearest Polaroid Office (addresses are in the User's Manual which come with the Digital Palette recorder).

EARLY RETURNS PROGRAM:

There is no early returns program.

WARRANTY POLICY:

All R5000/R6000 camera back/adaptors are warranted for one year from the date of purchase.

OUT-OF-WARRANTY POLICY

The procedures will be the same as they are for warranty repairs, except the Customer will charged for work performed, parts and labor.

PARTS/DOCUMENTATION:

Parts and Documentation for the LCD Projectors will be available as follows:

Parts Catalog (in service manual)	After October 95
Parts Availability	After October 95
Service Manual	After October 95

TRAINING:

Service Centers will be provided with a Service Manual. Formal training will not be necessary.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. ID4 #94-16

DATE: APRIL14, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: LIGHT LEAK IN ID4 2-UP HORIZONTAL CAMERAS

Some 2-UP horizontal format ID4 cameras manufactured during 1992 and early 1993 have been returned by customers with a complaint of overexposed subject areas. These complaints have been limited to the bottom card (the second exposure) of the 2-UP format.

Manufacturing has traced the cause of this problem to misformed light seals behind the camera back and the backplate. If the seals (1A3902B and 1A3903B) are misformed, they allow ambient light to penetrate to the subject area of the bottom card.

If you receive an ID4 camera with a light leak problem as described above, change the light seals and then check it as follows:

1. Load a pack of black & white film into the camera and secure the door.
2. Using a light source such as a flashlight, shine a light down onto the top of the camera back for a short length of time. (about 30 seconds)
3. Move the camera back to bring the second card into the exposure position.
4. Without exposing the second card, pull the film frame.
5. Peel the film and examine the frame for signs of light leaks.

If the camera back or back plate have to be replaced for any reason, also replace the two light seals (1A3902B and 1A3903B). These light seals are identified in Plate 6 of the ID-4 Parts Catalog as key numbers 1 and 2.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. ID4 #94-17

DATE: JUNE 10, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: **NEW ELECTRONICS PACKAGE AND SHUTTER FOR ID-4 CAMERAS**

BACKGROUND:

Starting in June 1994, Manufacturing will be using a new electronics package and a new Polaroid-designed shutter in the ID-4 camera.

The electronics package consists of four new pc boards: display board, mirror motor board, ranging board, and logic board. The primary change on these boards is the use of modified connectors which should reduce the incidence of accidental uncoupling.

The shutter is designed to be easy to disassemble and reassemble without the need for special tools or fixtures.

INTERCHANGEABILITY:

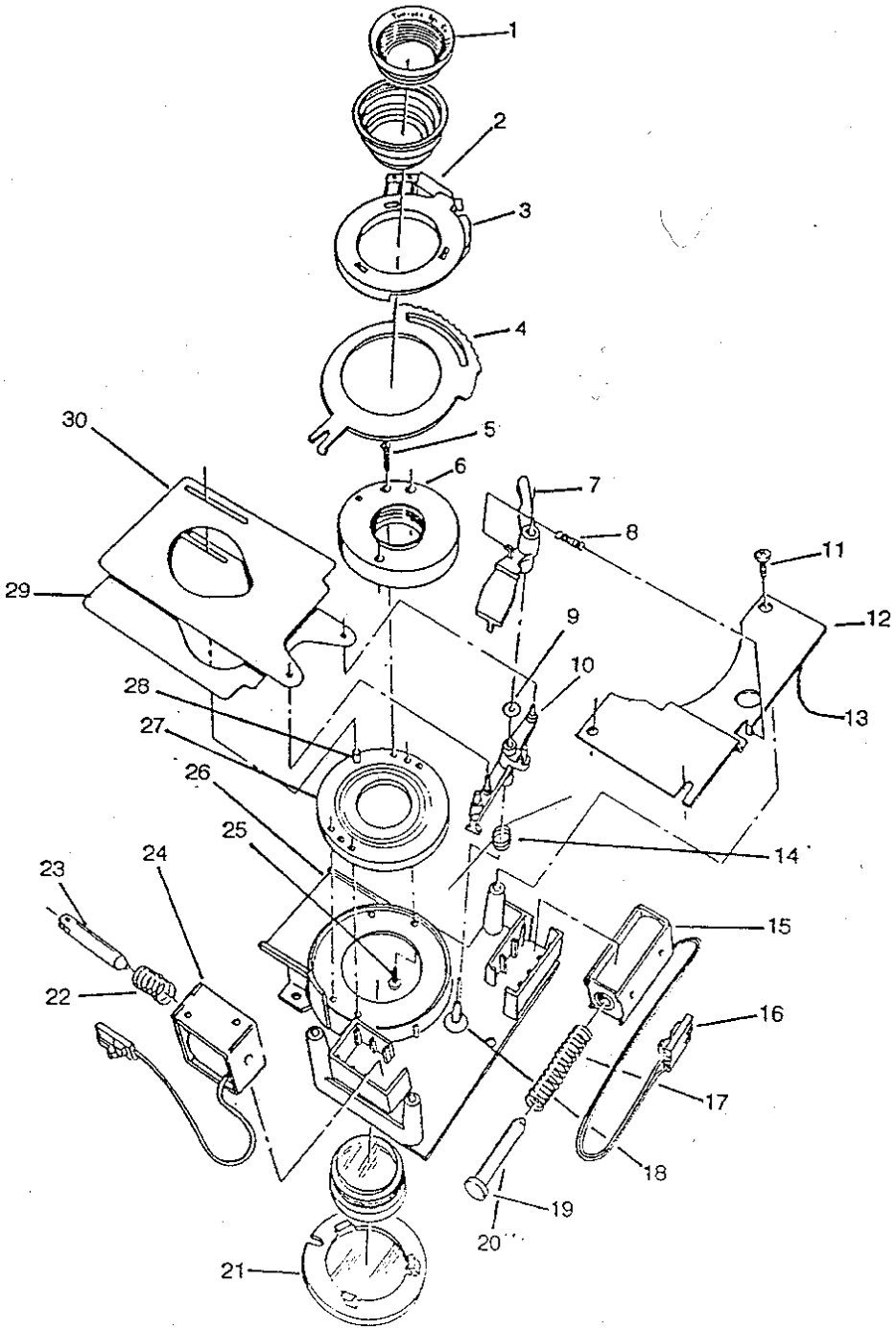
The new electronics package (**all four boards**) can be used with either new or old shutters. **None of the boards individually is interchangeable with the old boards.** i.e. You cannot replace an old logic board with a new logic board, an old display board with a new display board, etc;

New shutter assemblies **cannot** be installed in camera heads manufactured before May, 1994. (An exploded view and parts list for the new shutter is included with this alert.)

over

PLATE 1

ID1033A - SHUTTER ASSEMBLY



PARTS LISTS 1
ID1033A - SHUTTER ASSEMBLY

KEY NO.	PART NUMBER	PART NAME
1	2713010	Lens F4.5 114mm
2	2721190	Spring Detent
3	1 B2214A	Aperture Ring
4	1B2215A	Detent Disc
5	1 B7549D	Screw, #256 Flathead (3)
6	1B2213A	AB Mount
7	1B2217A	Interceptor
8	1A6786A	Extension Spring
9	1 B221 OA	Spacer (1)
10	1 B2208B	Walking beam
11	74333B	Screw, Plastite
12	1D1037A	Retainer Plate Assembly
13	1D1020A	Cushion (2)
14	1 B2209A	Opening Spring
15	1 B2239A	Exposure Cable Solenoid Assembly
16	1A4740A	Connector, 4Pin (Comes with assembly)
17	1 B2221 A	Compression Spring
18	1 B2207A	Pivot Walking Beam
19	1 B2222A	Plunger Adapter
20	770890A	Roll Pin (2)
21	2725070	Polarizer Assembly (in Current Product)
22	79710SA	Compression Spring
23	770890A	Roll Pin
24	794895A	Brightener Solenoid Assembly
25	1 B3255B	Screw, #256 Panhead
26	1 B2204A	Lens Mounting Plate
27	1 B2211A	C Element Mount
28	1 B3301 C	Pin/Dowel .093" Diameter
29	1 B2205A	Shutter Blade Bottom
30	1 B2206A	Shutter Top Blade

PARTS AVAILABILITY:

Material services in Cambridge will continue to stock old electronics boards and shutters as well as the new parts. The following chart shows part number for both old and new.

PART NAME	OLD	NEW
LOGIC BOARD	794238A	1B2995A
MIRROR MOTOR BOARD	798234A	1D3318A
RANGING BOARD	798059A	1D3316A
DISPLAY BOARD	797052A	1D3253A /B /C *
SHUTTER ASSEMBLY	271028	ID1033A

* A = Horizontal Format
B = Vertical Camera Head
C = Fixed Back (side pull

)Ploease order from normal sources.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. ID-4 #94-18
DATE: AUGUST 12, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____ _____
QUAL. CONTROL: _____ **OPERATIONS:** _____ _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: **DEFECTIVE CAPACITORS ON ID4 DATA BOARDS**

BACKGROUND:

ID-4 camera heads manufactured in late 1992 and most of 1993 are having a higher than expected return rate because of failed Data PC Boards (1A6338A).

Analysis of the failed boards has isolated the problem to capacitors C3 and C5 on the data board. These capacitors, yellow in color, were manufactured by Hua Jung Co. LTD. Failure of C3 causes the upper data tube to not fire, while failure of C5 causes the lower data tube to not fire.

CORRECTIVE ACTION:

An Engineering Change Notice has been issued for the data board print. Hua Jung Co. LTD. has been removed as an approved source for these capacitors, leaving Siemans as the only approved vendor. The Siemans capacitors are blue and carry part number 1A4814A.

Materials Services has placed an order for the Siemans capacitors, but these components are a long-lead item and are not expected to be available until the end of August. It is suggested that defective boards be replaced and that faulty boards be held until Siemans capacitors are available. At that time, replace C3 and C5 with the blue Siemans capacitors.

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. ID4 #94-19
DATE: OCTOBER 24, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____
QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS / DWAYNE BILLINGSLEY

SUBJECT: **INSTALLING POSISTORS IN CONFIGURATION "S" CAMERA HEADS**

BACKGROUND:

Problems have been reported with ID4 camera heads bearing configuration code "S" (indicating the new shutter) which were shipped from the factory after August 8, 1994. The problem could manifest itself by the overheating and actual burning of the solenoids in the camera head and U8 on Logic Board 1B2995A.

At this time, it is believed that all suspect camera heads were recovered before delivery to customers and they should all be located in warehouses in Needham, Massachusetts and Enschede, The Netherlands.

CORRECTIVE ACTION:

To correct this problem in new units, manufacturing is adding three posistors (also called polyswitches) to the ID4 camera head. These posistors (# CPS477) control current fluctuations, which are the cause of the overheating problems.

When servicing ID4 camera heads which are configuration "S", check to determine whether the posistors have been installed in the locations described below. If they have not, install them as instructed in the following steps.

This procedure should take about 35 minutes to complete. This includes unpacking, disassembly, reassembly and repacking.

REPAIR PROCEDURE:

NOTE: Before beginning, check the camera to be certain that it is functioning properly. If it is not, correct the problem before starting this procedure.

Preparation:

1. Using the inset in Figure 1 as a guide, trim the leads of three posistors # CPS477 leaving just enough bare wire for soldering.

2. Disassemble the camera head to gain access to the internal wiring.

Procedure:

1. Locate connector J2 at the LED board on the camera back and disconnect it from the board.

2. Trace the first wire at the left of the ribbon cable back about an inch from the connector. (The connector has a <u>key on the bottom</u>. Use this key to identify the *left* wire of the ribbon cable.) Cut and strip the wire as close to the connector as possible. (See Figure 1)

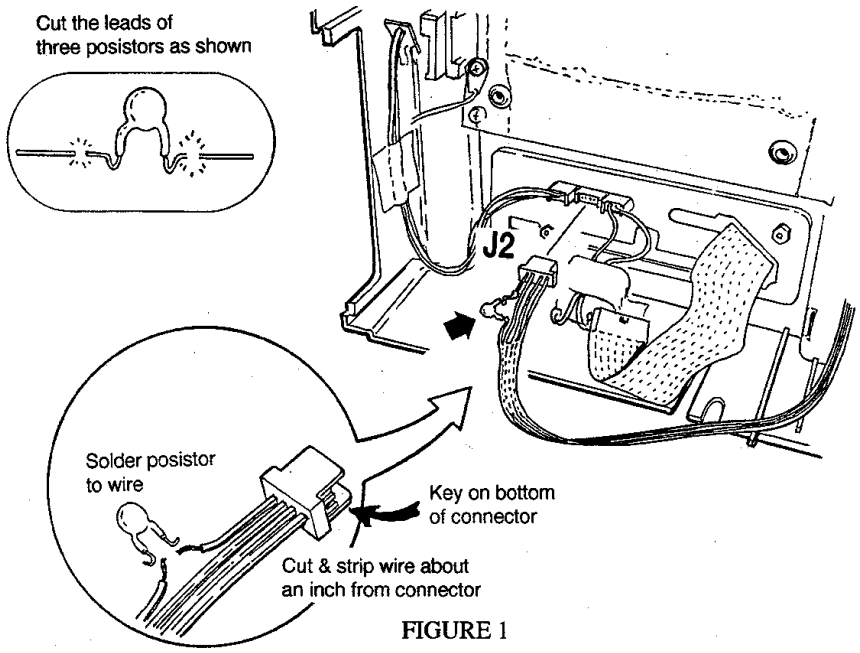

Cut the leads of three posistors as shown
J2
Solder posistor to wire
Key on bottom of connector
Cut & strip wire about an inch from connector

FIGURE 1

Solder one of the previously trimmed posistors to the wire. Use black electrical tape to fully cover the soldered joints and the posistor.

FIGURE 1

3. Solder one of the previously trimmed posistors to the wire. Use black electrical tape to fully cover the soldered joints and the posistor.

NOTE: The shutter blades are heat sensitive. Do not try to use shrink tubing in place of the tape.

4. Reconnect J2 to the LED board.

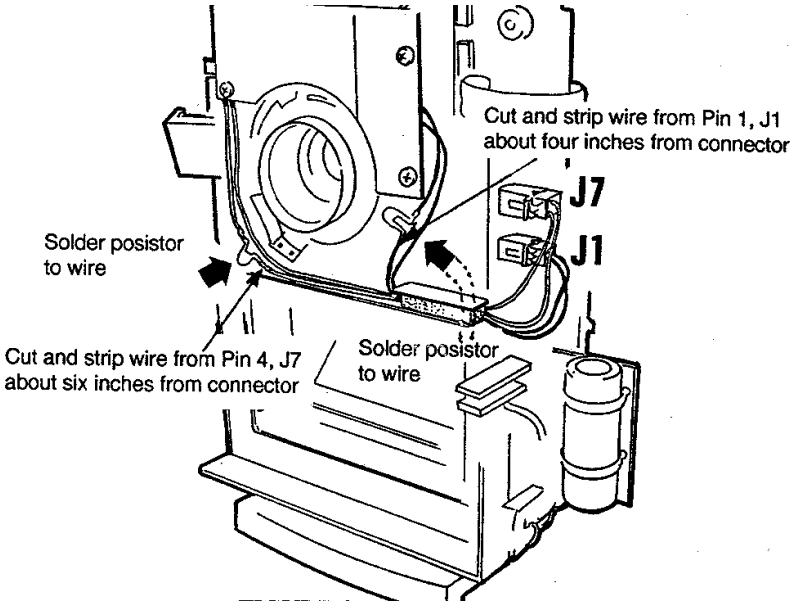


FIGURE 2

5. Using Figure 2, locate connector J1 and disconnect it from the brightness solenoid.

6. Identify the wire from pin 1 and trace it back toward the logic board. Cut and strip the wire about four inches from the connector.

7. Solder one of the trimmed posistors to the wire. Use black electrical tape to fully cover the soldered joints and the posistor.

8. Reconnect J1 to the brightness solenoid.

9. Using Figure 2, locate connector J7 and disconnect it.

10. Identify the wire from pin 4 and trace it back. Cut and strip the wire about six inches from the connector.

11. Solder one of the trimmed posistors to the wire. Use black electrical tape to fully cover the soldered joints and the posistor.

12. Reconnect J7.

13. Using a permanent marker, place a black dot next to the "S" on the configuration code label.

14. Reassemble the camera and test it to be certain that it is functioning properly.

PARTS AVAILABILITY:

Posistors #CPS477 (labeled AN RXE 025 by their manufacturer, RAYCHEM) are available from Material Services in Cambridge, Massachusetts. Please order from normal sources.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. ID4 #95-20
DATE: FEB. 10, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: BLADES ON ID4 SHUTTER (IE8400A) STAYING OPEN

BACKGROUND:

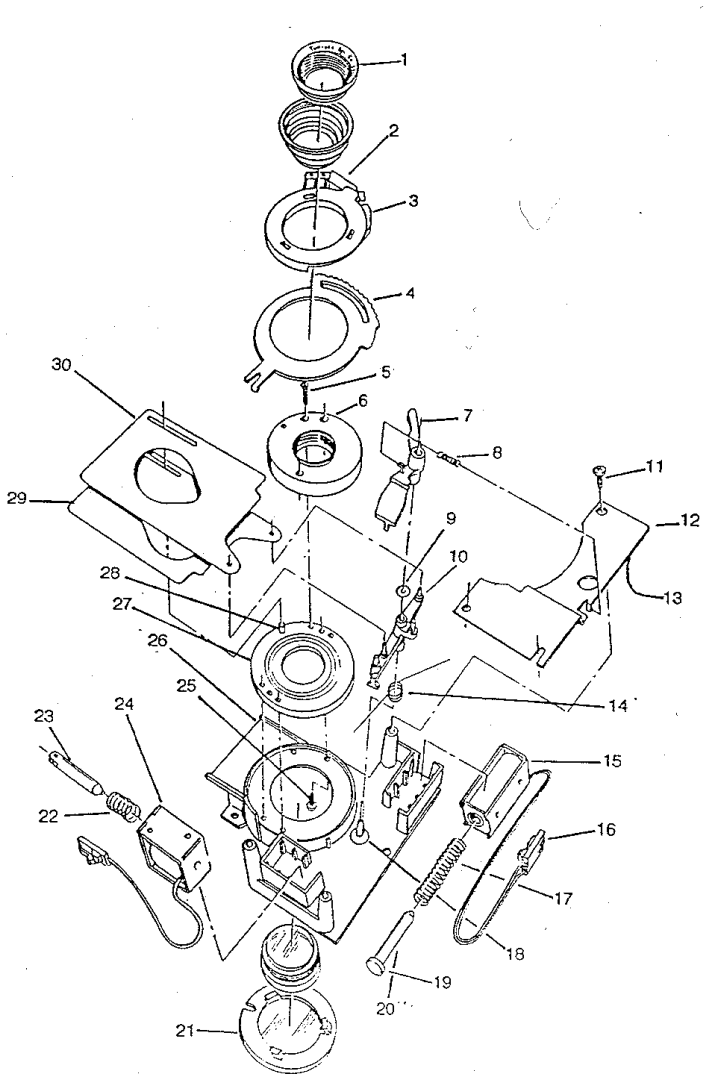
Some ID4 cameras manufactured between July 1994 and November 1994 are exhibiting a "shutter blades-open" problem which makes the camera non-functional. The cause has been traced to a cushion pad used during manufacture of the camera shutter. Cameras assembled during the noted period use shutters which have a single piece foam cushion under the retainer plate. (See accompanying exploded view.) The purpose of the foam cushion is to exert pressure against the retainer plate, thus allowing the exposure solenoid plunger (roll pin) to have free movement as it is extended and retracted. It has been discovered that these single piece cushions are compressing over time and as a result, the solenoid plunger is hanging up, keeping the shutter blades open.

Since November 1994, the shutters used in ID4 cameras use a two piece cushion under the retainer plate. The two piece foam cushion is not as susceptible to compression as the single piece cushion. The new two piece cushion carries part number 1D1020A.

CORRECTIVE ACTION:

If you receive a camera which was manufactured between July and November of 1994, examine the shutter. If there is a single piece foam cushion under the retainer plate, replace it with a new two piece cushion (1D1020A). Even if the shutter has the new two piece cushion, examine both pieces to be sure they have not compressed. If they have, replace them with new cushions.

IE8400A SHUTTER ASSEMBLY



KEY NO.	PART NUMBER	PART NAME
1	2713010	LensF45114mm
2	2721190	Spring Detent
3	1D1035A	Aperture Ring
4	1B2215A	Detent Disc
5	1 B7549D	Screw, #256 Flathead (33
6	1B2213A	AB Mount
7	1B2217A	Interceptor
8	1A6786A	Extension Spring
9	1B2210A	Spacer (1)
10	1B2208B	Walking beam
11	743333B	Screw, Plasffte
12	1B2218A	Retainer Plate Assembly
13	1D1020A	Cushion (2)
14	1B2209A	Opening Spring
15	1B2239A	Exposure Cable Solenoid Assembly
16	1A4740A	Connector, 4Pin (Comes with assembly)
17	1B2221A	Compression Spring
18	1B2207A	Pivot Walking Beam
19	1B2222A	Plunger Adapter
20	770B9OA	Roll Pin(2)
21	2725070	Polarizer Assembly (in Current Product)
22	797105A	Compression Spring
23	770890A	Roll Pin
24	794B95A	Brightener Solenoid Assembly
25	1 B3255B	Screw, #256 Panhead
26	1 B2204A	Lens Mounffng Plate
27	1B2211A	C Element Mount
2B	1B3301C	Pin/Dowel .093" Diamet
29	1 B2206A	Shutter Blade Bottom
30	182205A	Shutter Top Blade

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. ID4 #95-21
DATE: AUGUST 1, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: **UPPER MIRROR MOTOR ASSY PROBLEM IN VERTICAL ID-4's**

PROBLEM

If you receive an ID-4 vertical-format system for repair with complaints of multiple indicator lights illuminating on the display board and/or a shutter malfunction, the problem may be caused by a small piece of black masking tape on the mirror carrier.

This problem is most apt to occur in vertical-format systems manufactured during October of 1994. The black masking tape was used in a rework of horizontal-format ID-4's and should not be present in vertical systems.

SOLUTION

Removing the tape from the mirror carrier will solve the problem. To gain access to the tape, see the procedure and illustration on the reverse side. Any disassembly necessary is described in Section 4, pages 4-40 to 4-45 of the ID-4 Service Manual.

REMOVING TAPE FROM MIRROR CARRIER OF VERTICAL ID-4 SYSTEMS

1. Disassemble the camera to the point shown in Figure 1 (see Section 4 of ID-4 Service Manual).

2. Remove the wire retainer as shown in Figure 1.

3. If the top left corner of the mirror carrier (see Figure 1 balloon) is not visible and accessible, move the mirror carrier up by manually rotating the gear train: turn the small gear nearest the motor with a fingertip.

4. Use a penlight and turn the camera at an angle to see the small piece of masking tape on the top left side of the mirror carrier.

5. Remove the tape with tweezers or similar tool, being careful not to damage the surface of the mirror carrier.

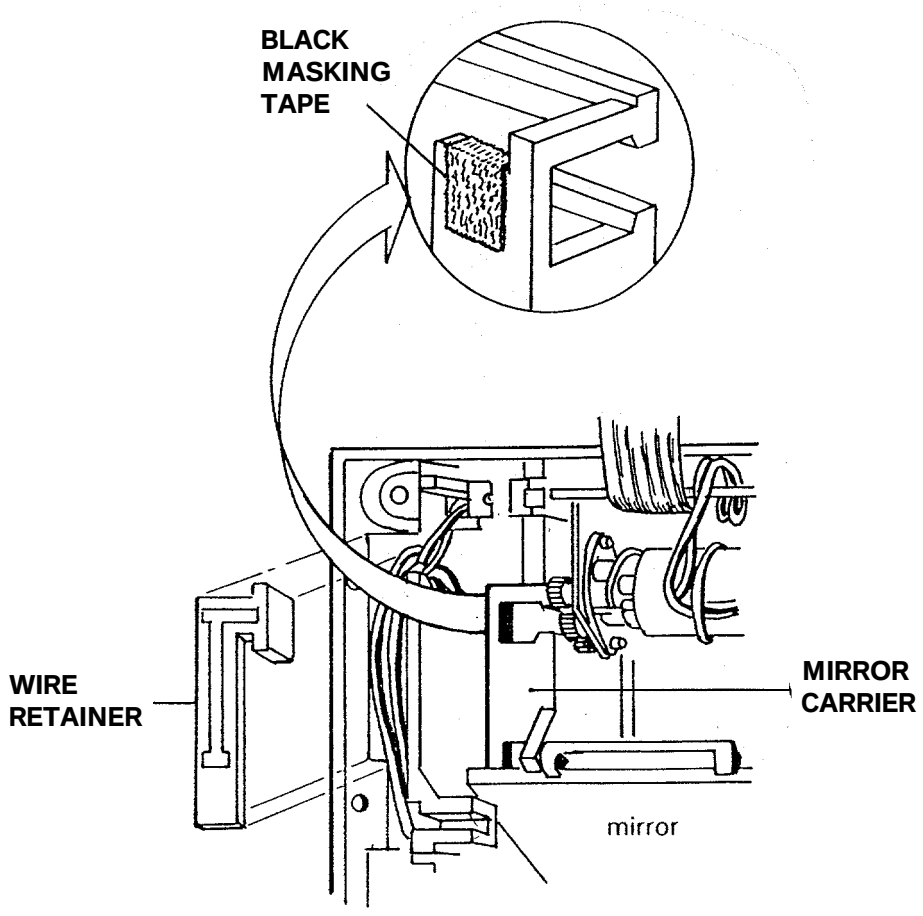


Figure 1 Tape Location on Vertical Format ID-4 Mirror Carrier

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. ID4 #95-22

DATE: SEPT. 25, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: DICK CURTIS

SUBJECT: END OF ID4 MANUFACTURE / SHUTTER SOLENOID DISENGAGING FROM LENS MOUNTING PLATE

NOTICE: ***This Alert serves notice that manufacture of the ID4 camera system will be discontinued after November 1995. A final buy of ID4 parts is currently being planned by Technical Services Logistics.***

BACKGROUND:

Some ID4 Polaroid shutters (manufactured between July, 1994 and April, 1995) have been returned for repair with a "blades not closing" complaint. When the camera head was opened, it was found that the solenoid had disengaged from the lens mounting plate and in some instances, the solenoid plunger was completely bypassing the walking beam.

Investigation by Manufacturing determined that the cause for this problem lay in the fact that the lens mounting plate post heights do not fall within specification. (Posts 1 and 2 shown in the illustration are 0.030" too high while post 3 is 0.020" too high.) Thus, the retaining plate cannot compress the cushions sufficiently to keep the solenoid in position.

CORRECTIVE ACTION:

Monitoring is continuing to determine the full extent of this problem and also to determine whether the modification outlined below is a satisfactory solution. Since current analysis indicates that the problem will occur at a very low rate (less than 2%), the following minimal action is thought to be adequate:

-over-

1. Remove the camera front cover.

2. Remove the two screws securing the strobe assembly and lift the assembly aside to the extent its electrical leads allow. This provides access to the shutter solenoid.

3. (Refer to Figure below.) Remove the three screws holding the retaining plate and disengage the extension spring between the plate and the interceptor. Set the retaining plate aside.

4. Firmly seat the solenoid in its nest on the mounting plate, being certain that it is properly aligned with the walking beam. Apply a thin bead of hot melt glue (Black and Decker #22235) on both sides of the solenoid as shown.

5. When the glue has cooled, apply pressure to the solenoid. It should not be able to move up or down or side-to-side and must be aligned with the walking beam. If these conditions are not met, repeat steps 4 and 5.

6. Reassemble the shutter and the camera head.

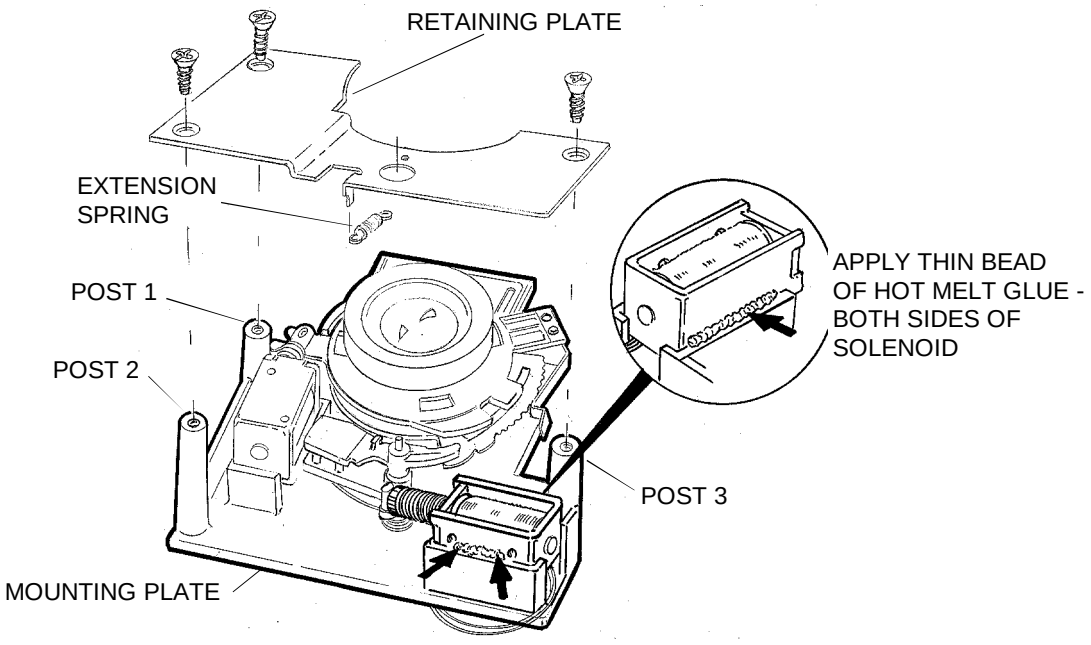
7. Power up the camera head and cycle it five times to ensure that the blades are opening and closing correctly. If they are not, determine the reason and correct it.

8. Mark the letter "G" after the serial number on the camera head to indicate that this procedure has been done.

9. Keep a record of the number of camera heads returned for this failure and whether any camera heads are returned for this failure after the hot melt glue procedure has been completed. This information will be needed for the monitoring program mentioned earlier.

MATERIALS REQUIRED:

Black and Decker hot melt glue # 22235 or equivalent



POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. ID100 #94-1

DATE: May 31, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____ _____

QUAL. CONTROL: _____ **OPERATIONS:** _____ _____

TO: **LIST**

FROM: **DWAYNE BILLINGSLEY**

SUBJECT: **NEW ID-100 INSTANT PHOTO IDENTIFICATION SYSTEM**

DESCRIPTION

The ID-100 shown in the accompanying illustration is a new, low-cost, portable ID Camera for making two identical or two different ID cards on one sheet of Polaroid film. The System can use Polaroid T-669 Polacolor, Polacolor ID Ultraviolet, or Polacolor 100 film.

The System consists of the Camera Head, Camera Stand, Dust Cover, Die Cutter and Laminator. It is expected to be available mid-second quarter of 1994.

PID numbers for Camera and Laminator model are:

ID-100 Camera Horizontal	(110V)	-	618294
ID-100 Camera Vertical	(110V)	-	618295
ID-100 Camera Horizontal	(220V)	-	618293
ID-100 Laminator	(110V)	-	618264
ID-100 Laminator	(220V)	-	618289

NOTE: Initially, the ID-100 Camera will be available in the Horizontal format only.

APPLICATIONS/MARKETS

The ID-100 System is designed for non-DMV applications with low to medium print volume. Expected users include manufacturing and service companies, schools, hospitals, local government agencies, etc.

WARRANTY - U.S.A.

Polaroid warrants the ID-100 Camera, Die Cutter and Laminator for one year from the date of sale.

WARRANTY - OUTSIDE U.S.A.

A warranty for non-U.S.A. customers will be developed by Polaroid subsidiaries.

EARLY RETURNS - U.S.A.

To provide an opportunity for complete product analysis, all ID-100 Systems will be centrally repaired by the manufacturer during the Early Returns Program. The Early Returns Program will exist for the first six months after introduction or the first 50 units, whichever comes first.

An Incident Awareness Form (IAF) should be completed by the first Polaroid representative in contact with the customer. Systems to be serviced and the IAF should be shipped to Polaroid Corporation, 784 Memorial Drive, Cambridge, MA 02139 ATTN: Dwayne Billingsley.

Use of exchange units issued by Oak Brook will be promoted for customers requiring service.

SERVICE PLAN - U.S.A. (Ongoing)

After the Early Returns Program, ongoing repairs and service will be provided by the manufacturer, through Polaroid Corporation, 2020 Swift Drive, Oak Brook, IL 60521.

Use of exchange units issued by Oak Brook will be promoted for customers requiring service.

SERVICE PLAN - OUTSIDE U.S.A.

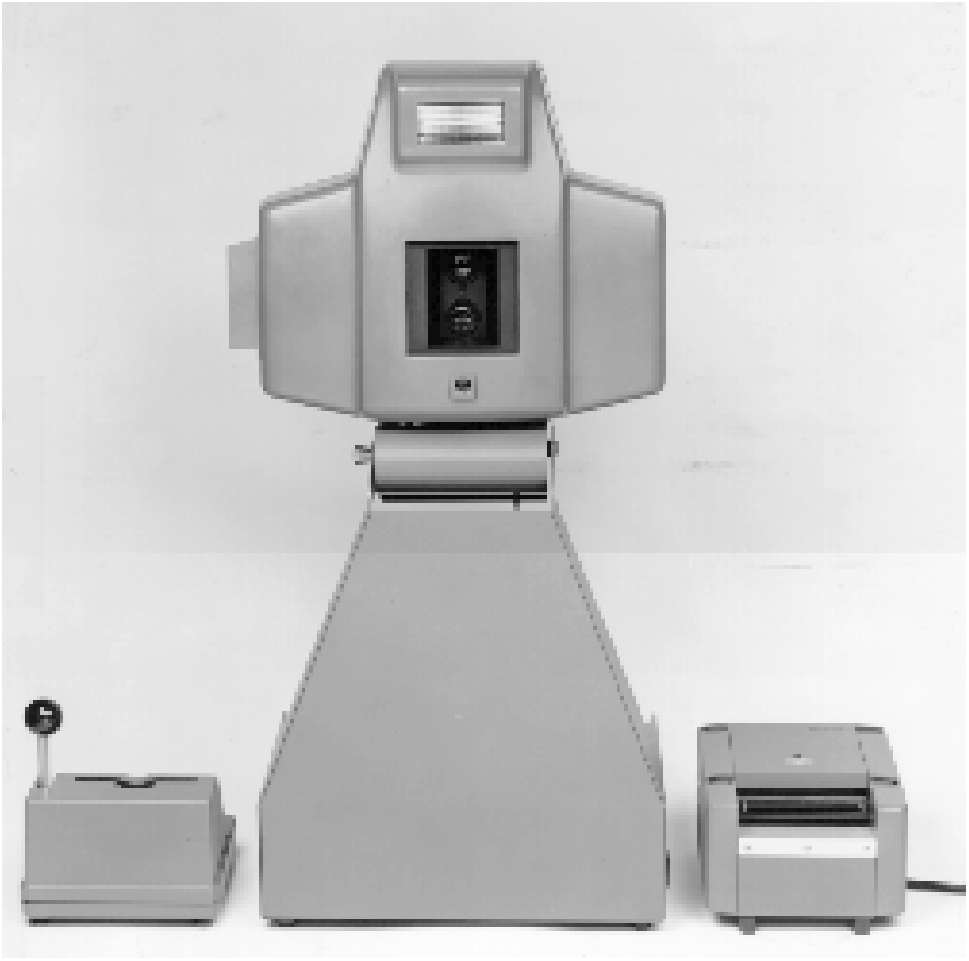
Ongoing service will be determined by the Regional Service management.

SERVICE TRAINING

Product simplicity allows self-training with a Service Manual and videotape, which will be available during the second quarter of 1994.

PARTS AVAILABILITY

Parts or exchange units will be available in the second quarter 1994, along with recommendations for initial start-up inventory.



New ID-100 Instant Photo Identification System

Feature Comparison — ID-100 and ID-4

	ID-100	ID-4
Camera Type	All Photo	All Photo
Portable	Yes	Yes
Configuration	H/V 2 Up	H/V 2/I Up
Focus	Fixed	Fixed
Sonar Ranging	No	Yes
Images per sheet	2	1 or 2
Two identical images	Yes	No
Removable Cardholder	No	Yes
Timer	(2) Battery	(2) Electronic/Battery
Camera Back	Fixed	Moveable
Polarizer Val Plate	Yes	Yes
Laminator	Heat/Pressure	Heat/Pressure
Die Cutter	2 chip	1 & 2 chip
Security Key	No	Yes
Warranty	One year	One year
Operator Diagnosis	No	Yes
Carry Case	Optional	Yes
Weight	24 lbs. (10.8 kg)	46 lbs. (20.9 kg)
Data Card Sizes	3-1/4"	3-1/4, 3-1/2 & 4"
Data Magnification	0.7	0.65 to 0.80
Face Magnification	.092 @ 54" .125 @ 40"	.092 @ 54" .125 @ 40"
Close-Up Lens	Yes	Yes
Aim Light	Fixed	Replaceable
Portrait Light Control	Continuous adj. 0.3 stop increm. over 0.5 stop range	Continuous adj. 1.5 stop increm. over 1.5 stop range
Face Aperture	Fixed	Variable f/4.5 - f/45
Data Aperture	Fixed	Fixed
Strobe Reliability	20,000 cycles: one misfire/5000 cycles	25,000 cycles: one misfire/5000 cycles
Data Strobe Output	Variable ±1.5 stop 0.3 stop increments	Variable ±1.5 stop
Dimensions	Stored position:	Operating mode (vert. camera)
	18 x 14.5 x 11.3" (45 x 36.8 x 28.7cm)	31.5 x 23 x 11.25" (80.0 x 58.4 x 28.6cm)
	Open position:	Carrying case w/base (handle folded)
	29.5 x 14.5 x 11.3" (74.9 x 36.8 x 28.7cm)	17.75 x 23 x 11.25" (45.1 x 58.4 x 28.6cm)

POLAROID CORPORATION

Consumer Services Division
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P. A. NO. ID100 # 96-1
DATE: JUNE, 1996

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: **LIST**

FROM: **DICK CURTIS/DWAYNE BILLINGSLEY**

SUBJECT: **DATA/SUBJECT STROBE PC BOARD UPDATE**

Problem

ID100 cameras manufactured before 12/31/95 have experienced subject/data card strobe malfunction when photographing either the subject or the data card.

Source of Problem

After analyzing the subject/data card strobe malfunction, it was determined that the trigger capacitors on both the subject strobe and the data card strobe PC boards were defective. Because of the defective trigger capacitors the subject/data card strobe failed to fire.

Action Taken

It is recommended that the trigger capacitors on the subject/data card PC board for all ID100 cameras manufactured before 12/31/95 be replaced when they are received for repair whether they have a subject/data card strobe malfunction or not.

Strobe PC board	**Before 12/31/95**	**After 12/31/95**
Subject	C1 - .047uf 400V Poly Film	C1 - .1uf 500V Ceramic
Data Card	C1/C2 - .047uf 400V Poly Film	C1/C2 - .1uf 500V Ceramic

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

Replacing Subject/Data Card Trigger Capacitors

Caution: Shock Hazard - High Voltage

It takes approximately 90 seconds to discharge the strobe capacitors down to 48 Vdc. **Always wait at least two (2) minutes** to make sure the strobe capacitors are fully discharged before attempting to remove the subject/data card strobe PC board.

Use a dump probe after the two (2) minute discharge time has elapsed to make sure the strobe capacitors are fully discharged.

1. Remove the subject/data card strobe PC board as explained in section 4 of the ID100 Service Manual.

2. Unsolder the .047uf 400V Poly Film trigger capacitors from the subject/data card strobe PC board being careful not to damage the subject/data card strobe PC board.

   Note: Refer to the subject/data card strobe schematic and board layout (Figures 1and 2) for the location of the trigger capacitors.

3. Solder the replacement trigger capacitors (.1uf 500V Ceramic) onto the subject/data card strobe PC board.

4. Install the subject/data card strobe PC board as explained in section 4 of the ID100 Service Manual.

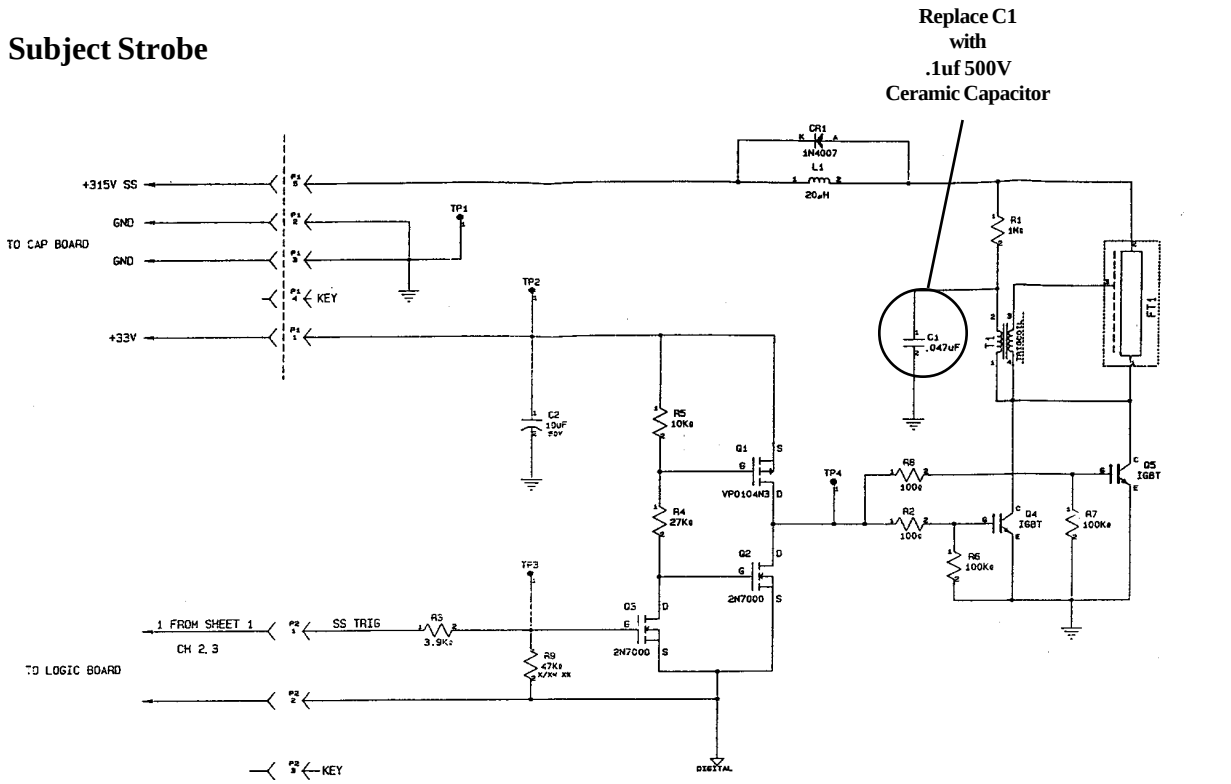
Parts Availability

Trigger capacitors (Part No. CPS 512) will be available after July 1, 1996 from:

Material Services Department
Polaroid Corporation
201 burlington Road
Bedford, MA 01730

Our inventory of strobe/data card PC boards will be purged and replacement PC boards will be available ASAP.

Subject Strobe



Data Card Strobe

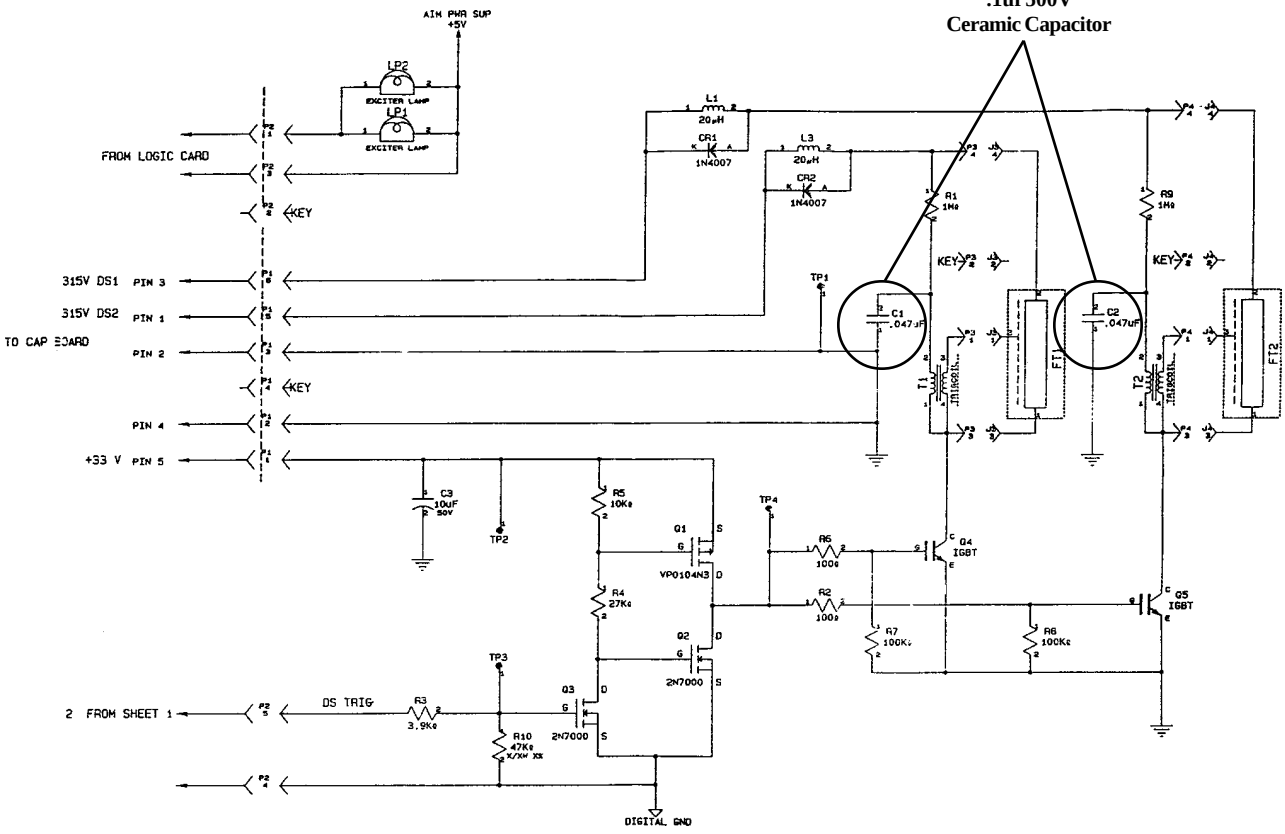
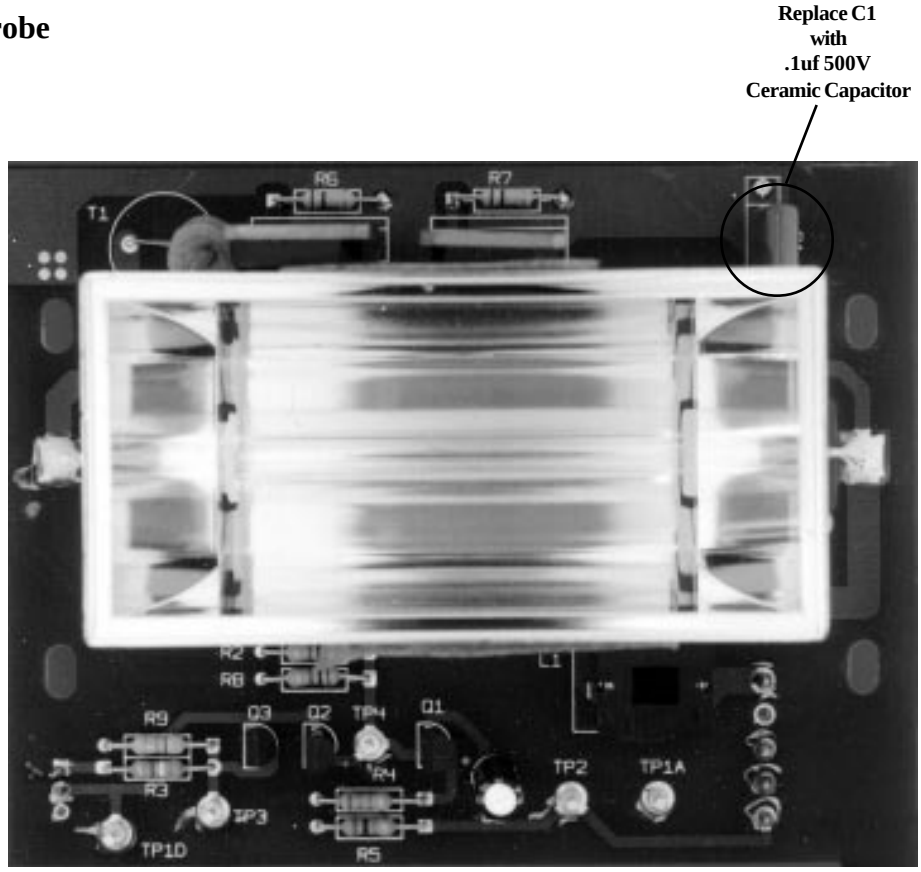


Figure 1. Subject/Data Card PC Board Schematic

Subject Strobe



Data Card Strobe

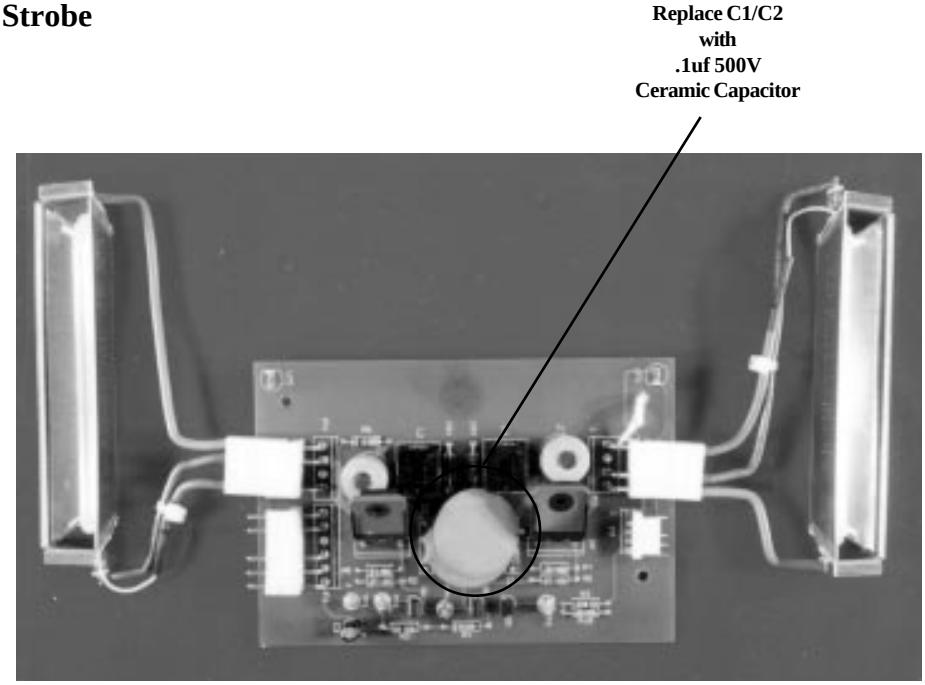


Figure 2. Subject/Data Card PC Board Layout

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

TECHNICAL SERVICES DEPARTMENT

NEW PRODUCT INFORMATION

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. TX #94-4

DATE: FEBRUARY 28, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: NICK CURRERI

SUBJECT: NEW TX-100 & TX-2000 THERMAL PRINTERS (NON-USA MARKETS)

BACKGROUND

Two new A6-size thermal printers of improved design - Model TX-1100 and Model TX-2000 are being introduced to replace the existing TX-1000 and TX-1500 Printers. Features include 8 bit color and 60 second imaging time. Media is the same as used by the TX-1000.

At this time the new Printers will be sold only in the non-U.S.A. markets.

FEATURES

- o PAL signal compatibility
- o Field or Frame capture
- o PUB, 15.625 kHz compatibility
- o S-VHS compatibility
- o Remote control (optional)
- o Mirror reversal
- o Stored image preview
- o Negative reversal
- o Multiimage: I,2,4,16~25 pictures/print
- o IEC 601 approved
- o 8 bit continuous tone
- o 60second print tone

Both Printers are of the same general design, but the TX-2000 has these additional features:

- o Cetronics input
- 0 RS232C input
- o Four and eight picture video instead of one and two picture video

WARRANTY

Model TX-1100 and Model TX-2000 thermal printers are warranted for one year from date of original purchase.

AVAILABILITY

The TX-1100 Printer (PAL) is now in stock at the Polaroid Distribution Center in Enschede.

TX-2200 Printers (NTSC) are available through Polaroid NPKK.

REPAIRS

All repairs of these Printers should be handled through normal channels in Europe and Japan. Presented below are the PID numbers of the various models.

TX2000 UNIVSL	Japan	PID #618305
TX2000 EUR	Europe	PID #618201
TX1100 E	Europe	PID #618200
TX1100 Remote Control		PID #618443

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. TX94-5
DATE: JULY 11, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____ _____
QUAL. CONTROL: _____ **OPERATIONS:** _____ _____

\TO: LIST

FROM: NICK CURRERI

SUBJECT: VERTICAL LINES/STRIKES IN TX1100 & TX2000 THERMAL PRINTER IMAGES

BACKGROUND:

Several European customer complaints of vertical lines or strikes in thermal printer images (see Figure 1 on next page) prompted an investigation by Polaroid. It was discovered that the lines or strikes result from a residue buildup on the thermal head. The buildup causes the media to travel through the printer in an intermittent drive of slip and feed, slip and feed, rather than in a smooth, steady motion. Each vertical line on the finished print is an indication of the media slipping.

Further checking found that the buildup occurred only with certain media and only when the prints being processed were in the medium density range. For medium density prints, the thermal head temperature is at a value that results in the donor ribbon occasionally hanging up instead of slipping past the head as it properly should. This action does not occur with high density or low density images.

-over-

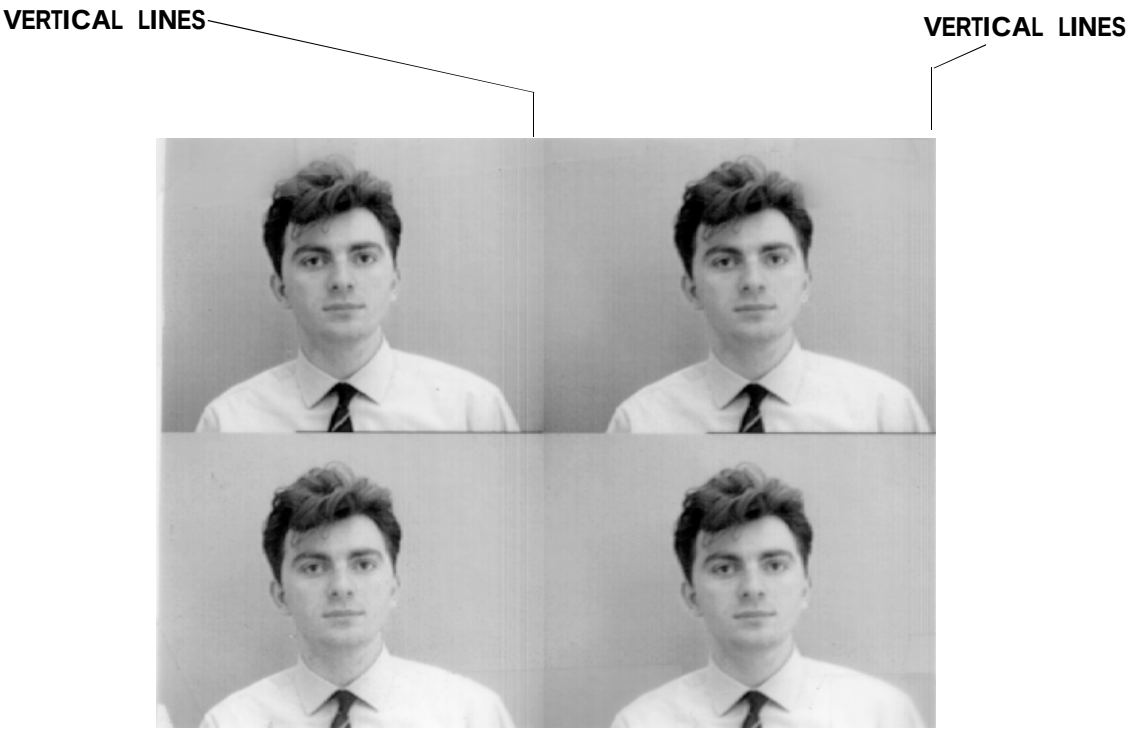


Figure 1 Example of Vertical Lines/Strikes in Thermal Printer Images

The next phase of the investigation was to determine why procesing medium density prints resulted in a buildup on the thermal head. The problem was traced to a batch of media donor ribbon which has an incorrect coating. Normally, any residue on the head is cleaned by the action of the media feeding through the machine. However, the buildup from the incorrectly coated media donor ribbon is so great when medium denisty prints are being processed, that the normal cleaning action does not work. In fact, each pass of defective media causes the buildup to increase. Lines or strikes which are most pronounced are from heads that have the greatest residue buildup.

Product tracing has determined that the defective media is in lots which was made in December 1993, January 1994, and February 1994. **This media can be identified by the manufacturing dates located on the display boxes (i.e. 1993.12, 1994.1 and 1994.2) or from lot numbers located on the ink cassette**. (Figure 2)

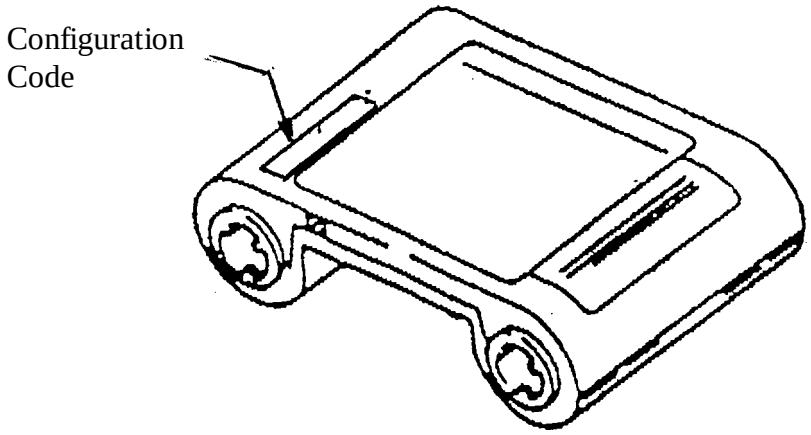
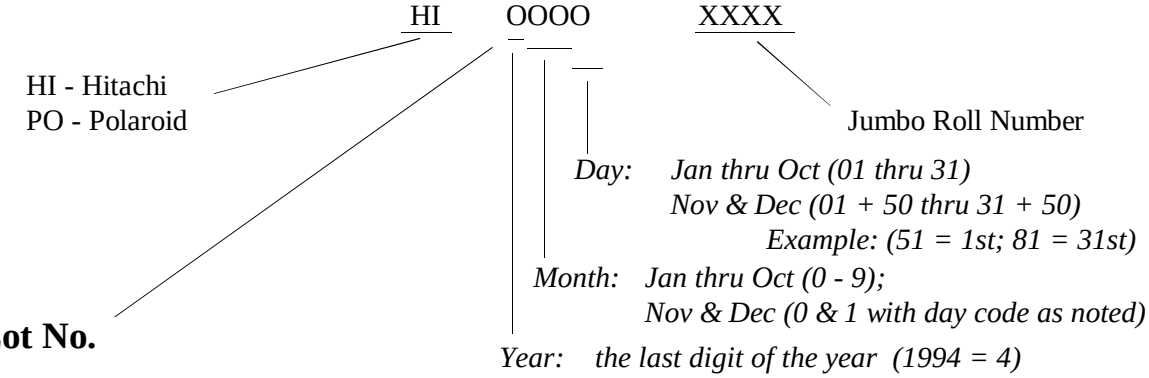


Figure 2 Location of Configuration Code on Ink Cassette

The following table explains how to read the configuration code to identify media manufactured between **December, 1993 and February 1994**.

Thermal Media Configuration Code:

1. Configuration


HI
OOOO
XXXX
HI - Hitachi
PO - Polaroid
Jumbo Roll Number
Day: Jan thru Oct (01 thru 31)
Nov & Dec (01 + 50 thru 31 + 50)
Example: (51 = 1st; 81 = 31st)
Month: Jan thru Oct (0 - 9);
Nov & Dec (0 & 1 with day code as noted)
Year: the last digit of the year (1994 = 4)

2. Lot No.

Month	Lot No.			Month	Lot No.		
Jan	**4001**	**-**	**4031**	**Jul**	**4601**	**-**	**4631**
Feb	**4101**	**-**	**4128**	**Aug**	**4701**	**-**	**4731**
Mar	**4201**	**-**	**4231**	**Sep**	**4801**	**-**	**4830**
Apr	**4301**	**-**	**4330**	**Oct**	**4901**	**-**	**4931**
May	**4401**	**-**	**4431**	**Nov**	**4051**	**-**	**4080**
Jun	**4501**	**-**	**4530**	**Dec**	**4151**	**-**	**4181**

EXAMPLE: Defective media made in December 1993 would have a code of 3151 through 3181
Defective media made in January 1994 would have a code of 4001 through 4031
Defective media made in February 1994 would have a code of 4101 through 4128

CORRECTIVE ACTION:

Replacement media has already been shipped to Polaroid-Europa and is now available in our distribution system. Customers should be instructed to avoid use of media with the noted date codes.

If the lines or strikes have been barely visible, there is a possibility that running some test cycles with good media will clean the heads. If the lines or strikes indicate a heavier buildup, the heads may have to be cleaned with alcohol.

There may be instances where cleaning the heads with alcohol will not remove the buildup and lines still appear on test prints. In these cases, the head must be removed and a new thermal head installed in the printer.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l ☐ **EXP** ☐ **SUB** ☐ **SPECIAL**

P.A. NO. TX94-6
DATE: JULY 11, 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: NICK CURRERI

SUBJECT: STRIPPED GEAR IN TX1100/TX2000 THERMAL PRINTERS CAUSED BY JAMMED MEDIA

BACKGROUND:

A small number of TX1100/TX2000 thermal printers have been found with a stripped gear problem. The gear in question (6437411) is identified as key number 25A in Parts List 2 of the revised TX1100E Printer Parts Catalog, dated June 1994.

Analysis of this problem has determined that the gear can be stripped as a consequence of a media jam. Specifically, if message "Error 14" is displayed on the printer readout, it is an indication of a jam which **must be cleared by a repair person.**

If the printer is unplugged when message "Error 14" is displayed, the error message will not reappear when the machine is plugged in again and the customer will likely attempt to cycle the machine. If this happens, there is a strong possibility that the teeth on the gear identified above will be stripped.

CORRECTIVE ACTION:

Customers should be advised to send printers to a Polaroid location for repair whenever message "Error 14" is displayed on the printer readout. Future generations of TX1100 and TX2000 printers will have an electronic redesign that retains the error message even after the machine is unplugged. As a result, when the machine is turned on again, the error message will reappear on the readout.

POLAROID CORPORATION

Consumer Services Division
784 Memorial Drive
Cambridge, MA 02139

TECHNICAL SERVICES DEPARTMENT

PRODUCT ALERT

Int'l

☐ **EXP**
☐ **SUB**
☐ **SPECIAL**

P.A. NO. TX 95-7
DATE: JAN. 6, 1995

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: NICK CURRERI

SUBJECT: CLEARING PAPER JAMS IN THE TX-1500 PRINTER

When a paper jam occurs in the TX-1500 printer, the READY, INK, and PRINT button lights all blink at the same time. To clear a paper jam, do the following:

1. With the unit ON, unplug the power cord from the wall. Leave it unplugged for about 5 seconds.

2. Plug the power cord back in. This allows the unit to cycle and will often allow the paper to free itself, thus clearing the jam.

IF THE PAPER REMAINS JAMMED:

1. Referring to Figure 1, remove the ink cartridge.

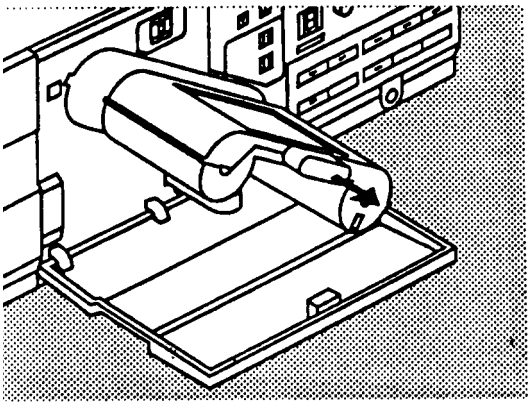


FIGURE 1 REMOVING THE INK CARTRIDGE

THIS BULLETIN SHOULD BE FILED IN THE SERVICE MANUAL OF THE PRODUCT TO WHICH IT REFERS.

In the following step, ***DO NOT FORCE THE DRUM.***

2. Try turning the drum GENTLY counter-clockwise as shown in Figure 2. If the drum moves freely, the jammed paper can be removed. If the drum does not move freely and you attempt to force it, it is likely that one of the plastic gears in the drum roller mechanism will be stripped.

3. If the drum does not move freely, return the printer to a service location.

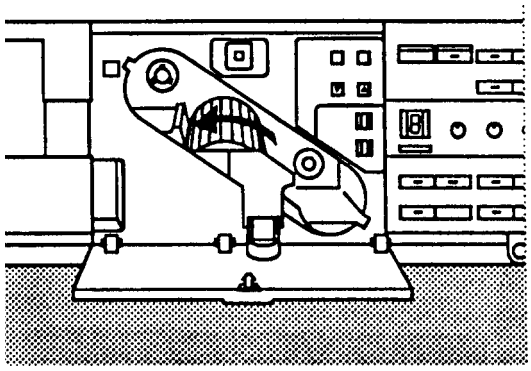


FIGURE 2 TURNING THE DRUM COUNTER-CLOCKWISE

POLAROID CORPORATION

Customer Support Services
201 Burlington Road
Bedford, MA 01730

GLOBAL TECHNICAL SERVICES

PRODUCT ALERT

Int'l

- ☐ **EXP**
- ☐ **SUB**
- ☐ **SPECIAL**

P.A. NO. CI-700 #94-2

DATE: FEBRUARY 21. 1994

TECH. SERVICES: _____ **MAT'L SERVICES:** _____

QUAL. CONTROL: _____ **OPERATIONS:** _____

TO: LIST

FROM: SUSSAN COLEY

SUBJECT: CI-700 PHOTOPRINTER PRODUCTION DISCONTINUED

BACKGROUND:

A decision has been made by the EIS Business Unit to cease further production of the CI-700 PhotoPrinter.

REPAIRS - POLAROID-BRANDED PRODUCT:

All repairs and service of Polaroid-Branded CI-700 units will be performed in Cambridge, MA via exchange units. (An inventory of PhotoPrinters will be maintained for this purpose.)

REPAIRS - OEM UNITS:

A quantity of PhotoPrinter OEM units have been sold with no requirement for service - that is, with no warranty charge imbedded in the price of these units to the OEM.

Account managers have been so informed and urged to offer attractive pricing/terms on units stocked for exchange purposes.

Polaroid Digital Products Service BULLETIN

KB# 981009163430GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot Parallel Vol. 1, No. 1

From: New Products Service Support Group
Date: October 7, 1998
Subject: **Windows 95 OS - Slow Printing**

- **Category: EI Service Bulletin**

  The purpose of this message is to alert Telephone Service and Repair providers regarding the solution to the problem of slow printing (3 – 5 minutes) when using the ColorShot Parallel version running under Windows 95.

- **Products Affected:**

  Polaroid ColorShot Parallel printer
  Polaroid PhotoMAX PhotoPrinter

- **Details:**

  The customer successfully installs the printer on their PC but, after clicking on the "Print" button in their image editing application, the time to output a print is 3 to 5 minutes.

- **Resolution:**

  The solution is for the user to get (from another PC, a friend, or other source) the latest version of a driver named Lpt.vxd and install it on their user's PC. The version should 4.00.503, or later. The path to this file is: C:WINDOWS\SYSTEM (where C is the typical letter designating the root drive)

  A second way to get the driver is to download it from Microsoft. Connect to the following Microsoft FTP site on the World Wide Web:

  ftp://ftp.microsoft.com/services/whql/drivers/win95/printr.

  Download the file named A1701.exe. A1701.exe is a self extracting file that, once expanded, contains the lpd.vxd file. Copy this file to the WINDOWS\SYSTEM folder.

  After the file is updated, restart the PC. After restarting, try printing again. Print time should now be about 30 seconds.

  Contact: Gerald DiBello
  Cc:mail: DIBELLO, GERALD
  Internet: dibellg@polaroid.com

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Polaroid Digital Products Service BULLETIN

KB# 981012091903GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot Parallel Vol. 1, No. 2

From: New Products Service Support Group
Date: October 9, 1998
Subject: **Problems with Printer Installation/Operation - Compaq Deskpro PC's**

- **Category: EI Service Bulletin**
  The purpose of this message is to alert Telephone Service and Repair providers regarding the solution to problems the can happen when installing the ColorShot Parallel on Compaq Deskpro 2000, 4000, or 6000 series PC's.

- **Products Affected:**
  Polaroid ColorShot Parallel printer
  Polaroid PhotoMAX PhotoPrinter

- **Details:**
  1. User is unable to install the printer either by the plug and play method, or using the Add printer Method. If you change the port setting in the Compaq's proprietary BIOS has no effect on the PC's ability to recognize the printer.
  2. User may be able to install the printer, but when trying to print an error message is seen.

- **Resolution:**
  The solution is to get the latest version of the lpt.vxd driver from Compaq. Connect to the following Compaq location on the World Wide Web:

  http://www.compaq.com/support/techpubs/customer_advisories/dt0005.html

  There is a link on the bottom of this page (an application note regarding printer problems) to a file download page. On the download page select the file named SP2345.exe and download it. SP2345.exe is a self extracting file that, once expanded, contains the file Prntupd4 and a readme file. The readme file instructs the user on how to launch the upgrade to automatically install a new version 4.00.954 lpt.vxd file.

  If the ColorShot printer was not already installed it should now be recognized as a plug and play device and install normally. If the user had already installed the printer you may need to uninstall it, re-start the PC, and install it again.

  Contact: Gerald DiBello
  Cc:mail: DIBELLO, GERALD Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 980612084030GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot USB Vol. 1, No. 1

From: New Products Service Support Group
Date: June 12, 1998
Subject: **Image Breakup in Prints**

- **Category: Product Alert**
  The purpose of this message is to alert service providers regarding a printing problem that might be seen by end user's.

- **Products Affected:**
  Polaroid ColorShot USB printer

- **Details:**
  Problem Description: End user selects the "Print" command from their image editing application. While a print cycle is in process, the user switches to another application and begins to work in that application. The print cycle will appear to be working normally and a print will eject. After the print develops the image that develops is broken up horizontally. The sample image, below, shows one type of image breakup. In other cases, the effect may appear as horizontal banding in only part of the printed image. In this instance, the image looks Ok above and below the banded or broken-up portion.

  This problem appears to be hardware dependent. It is more likely to happen on older and slower Pentium processors (100Mhz or, below) with certain types of graphic boards. Typically, the user has a number of applications open when the print command is selected and they switch to one of the applications while the print cycle is in process.

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

- **Resolution:**

  If users report this type of problem, ask them to try to print again but, do not switch to another application during the print cycle. Another suggestion would be to close one or more open applications before they select the Print command.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Polaroid Digital Products Service BULLETIN

KB# 980702143545GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot USB Vol. 1, No. 2

From: New Products Service Support Group
Date: July 2, 1998
Subject: **Windows 98 Compatibility**

- **Category: EI Service Bulletin**

  The purpose of this message is to alert telephone support and service providers regarding issues with ColorShot Software and the Windows 98 Operating System

- **Products Affected:**

  Polaroid ColorShot USB printer

- **Details:**

  Two subjects are covered in this bulletin

  1. *ColorShot software version 1.03. This is the first release that is designed to be fully compatible with Windows 98*
  2. *Correct ColorShot software installation when a Windows 95 PC is upgraded to Windows 98*

- **Resolution:**

  1. Version 1.03 software is designed to be fully compatible with Windows 98. Version 1.02 can be used but, it may have anomalies.
  2. Before upgrading a PC from Window 95 to Windows 98 the ColorShot software should be removed. Use the normal de-install procedure to do this. A review of the procedure is as follows: a) Remove the USB cable from the back of the printer. b) Use Add-Remove Programs to remove Polaroid IQA for ColorShot. c) Delete the Polaroid ColorShot from the Printers folder.

     After the Windows 98 upgrade is complete, re-install the ColorShot software. Note that installation of the ColorShot software on a Windows 98 PC is a slightly different procedure than the one outlined in the existing QuickStart Guide.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Polaroid Digital Products

Service BULLETIN KB# 980710145413GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot USB Vol. 1, No. 3

From: New Products Service Support Group
Date: July 10, 1998
Subject: **Intel USB Ready Utility**

- **Category: EI Service Bulletin**
  The purpose of this message is to alert Telephone Service providers regarding the availability of a useful USB checking utility.

- **Products Affected:**
  Polaroid ColorShot USB printer used with Windows 95

- **Details:**
  A new version 2.8 of Intel's USB Checking program has been released. The new version is more user friendly than the older version. The new version checks the host PC's hardware and software to determine USB readiness.

  - *If the appropriate USB hardware and Windows 95 software is found: The program reports - "System hardware has USB Support."*
  - *If there is no USB host controller in the PC: The program reports - "System Hardware DOES NOT have USB Support. Recommend upgrade system hardware for USB support"*
  - *Recommends that the user upgrade to Windows 98 for "Full" USB support*

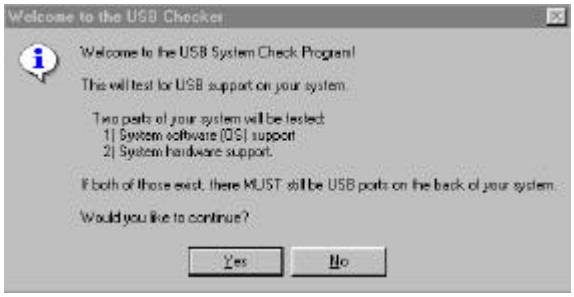
  A copy of USBReady.exe can be downloaded from the web at the following location: www.usb.org./USB/Usbready.exe

  Suggested uses for USBready.exe:

  - For Potential customers – They can check their PC for USB readiness prior to purchase of the ColorShot printer
  - For Customers that already have the printer - Telephone Support can quickly determine the PC's USB readiness.

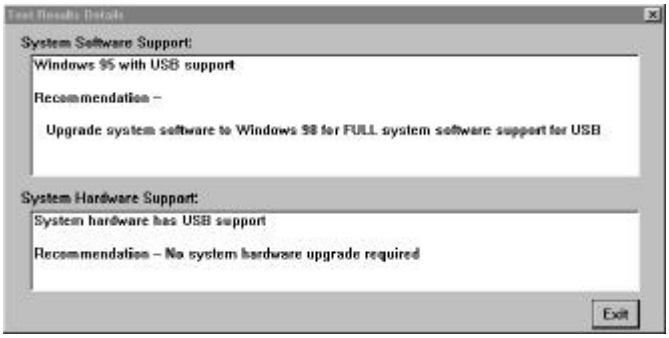
  Sample windows from USBready.exe are shown on the next page:

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.


Welcome to the USB Checker
Welcome to the USB System Check Program!
This will test for USB support on your system.
Two parts of your system will be tested:
1) System software (OS) support
2) System hardware support.
If both of those exist, there MUST still be USB ports on the back of your system.
Would you like to continue?
Yes
No

Screen 1

Screen 2 (after clicking Yes button on Screen 1)


System Software Support:
Windows 95 with USB support
Recommendation –
Upgrade system software to Windows 98 for FULL system software support for USB
System Hardware Support:
System hardware has USB support
Recommendation – No system hardware upgrade required
Exit

Screen 3 (after clicking on Details button on Screen 2)

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 980904144249GD

201 Burlington Rd. Bedford MA 01730

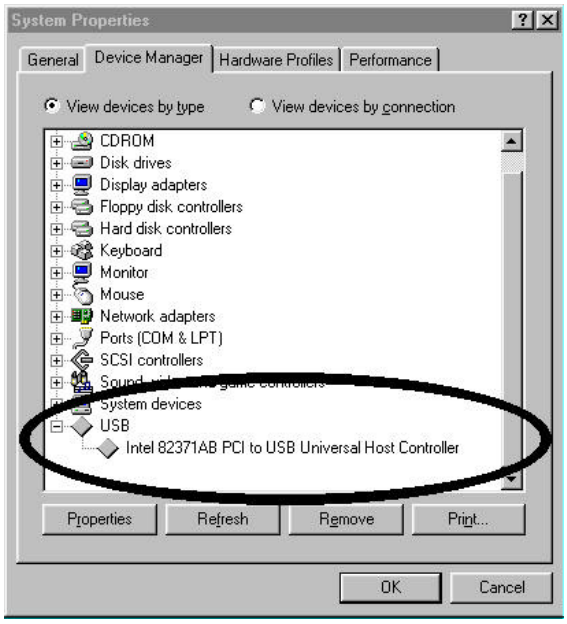
Polaroid ColorShot USB Vol. 1, No. 5

From: New Products Service Support Group
Date: September 4, 1998
Subject: **Win 95 - Missing Root Hub**

- **Category: Software Info Bulletin**
  The purpose of this message is to alert Telephone Service and Repair providers regarding the solution to a problem of a missing USB Root Hub when operating under Win 95.

- **Products Affected:**
  Polaroid ColorShot USB printer

- **Details:**
  *The Customer tries to install the ColorShot USB printer and it is not recognized. A look in the device manager shows that that USB icon is present but, only the following text appears when the USB icon is expanded (click on + sign next to USB gray diamond icon) "**Intel 82371AB PCI to USB Universal Host Controller**." See image, below, showing the problem. No "Root Hub" listing is an indication that the PC has an Intel 440LX or 430TX Chipset on it's motherboard that it's not recognized by the USB supplement software.*



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- **Resolution:**

  The Intel® 82371AB PCI to USB Universal Host Controller is part of the Intel 430TX or 440LX chipset found on many PC motherboards. In Microsoft Windows 95™, special device information (*.INF) files are used to specify and define the characteristics of various controller and device classes of the operating system. These *.INF files can be found in the \WINDOWS\INF directory.

  However, the PCI Device ID's for the functions embedded in the 440TX or 440LX chipset are not listed in the current version of Windows 95 OEM Service Release 2 that contains the USB supplement. For this reason, after installation of Windows 95 in Intel 430TX and 440LX the USB Root hub will not be present in the Device Manager.

  Instruct the customer to download and install a patch that's available from Intel on the World Wide Web. The patch makes changes to the MACHINE.INF, MSHDC.INF, NODRIVER.INF and USB.INF files. For customers without web access there other ways to get the patch file.

  1. Check CD-ROM installation disks that came with their PC. In some cases this file is called PIIXFIX.exe.
  2. Contact the manufacturer of the PC.
  3. Download the file so that it can be sent to the customer

  The patch file named "Intel(R) 82371xB INF Update Installer Version 3.2.2" is available (as of the date of this bulletin) on the web at:
  http://developer.intel.com/design/pcisets/setupex.htm

  The customer should execute the file and then re-boot their PC. After restart the USB root hub should be installed and shown in the Device Manager.

  Contact: Gerald DiBello
  Cc:mail: DIBELLO, GERALD
  Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 981012172712GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot USB Vol. 1, No. 6

From: New Products Service Support Group
Date: October 12, 1998
Subject: **Software Releases**

- **Category: Software Info Bulletin**
  The purpose of this message is to provide a summary of the ColorShot USB released software history for Telephone Service and Repair providers.

- **Products Affected:**
  Polaroid ColorShot USB printer

- **Details:**
  Since the ColorShot USB printer was first released for sale, a number of revisions have been made to the software. A summary of the releases:

Released Software

Version	Description
1.02	First USB version (for Windows 95)
1.03	Windows 98 and Windows 95 compatibility
1.04	Software revision to correct a potential misread of the film pack presence switch (located inside the printer).
1.05	(Current released version) Adds *new* IQA color profiles for enhanced color performance.

Available Software Update Files

At the time this bulletin was released, two software update files exist. These small files can be e-mailed or put on a floppy disk to send to users. If you need these files, contact the author of this bulletin.

Update 1 – Installs updates for Windows 98 users, only
Update 2 – Installs version 1.05 color profiles in any version of the software.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

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Polaroid Digital Products

Service BULLETIN NPI#: 971217143846 GD

201 Burlington Rd. Bedford MA 01703

SprintScan Vol. 1, No. 14

From: New Products Service Support Group
Date: 12/16/97
Subject: SPRINTSCAN 45 CCD & CONTROLLER BOARD REPLACMENT

- **Category: Product Alert**

  The purpose of this message is to alert service providers that repair the SprintScan 45 regarding CCD and Controller Board compatibility issues

- **Products Affected:**
  SprintScan 45 and SprintScan 45 Pro.

- **Details:**
  Problem: Replacing a known defective CCD board does not repair the problem and, in some cases, seems to make the problem worse. The problem is caused by mismatched board revision levels. Revision level must be considered when replacing boards.

- **Resolution:**
  Recent information received from Manufacturing shows that board revision level must be taken into consideration when replacing CCD or Controller boards. The two acceptable board revision level combinations are as follows:
  1. Rev. **A3** Controller Boards must be paired with rev. **A3** CCD boards.
  2. Rev **A4** Controller Boards must be pair with rev. **B1** CCD boards (The current revision levels of product shipping from the manufacturer).

  Please take this information into account when repairing the SprintScan 45. Mixing revision levels can lead to image quality problems. **Note:** If you only have revision level B1 CCD boards in your stock and you are repairing a unit that has a rev A3 Controller board then you must also replace the controller board with a rev A4.

  How to identify circuit board revision level
  a) CCD Board Revision Level
  Revision level information can be found at the top of the circuit board (see Figure 1). Revision level marks are shown as X, Y in Figure 1 where X = A or B and Y = a number.

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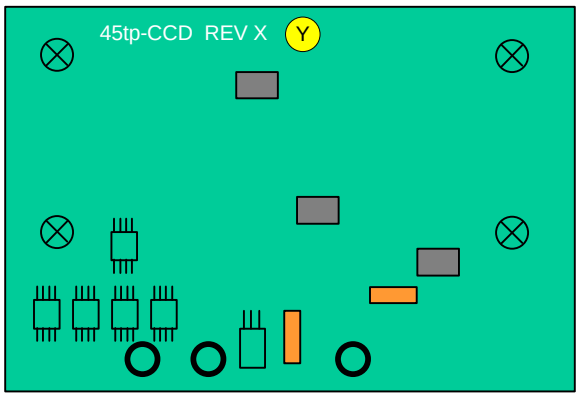

Figure 1 – CCD Board (rear view)

b) Controller Board Revision Level
Revision level information can be found at the rear of the circuit board (see Figure 2) near the SCSI connectors. Revision level marks are shown as X, Y in Figure 2 where X = A and Y = a number.

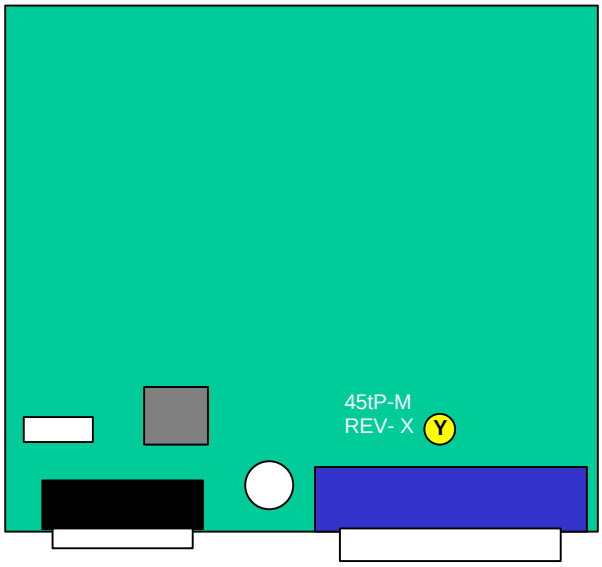

Figure 2 – Controller Board (rear of board – top view)

- **Contact:** Gerald DiBello
  E-mail: DIBELLO, GERALD, Internet: dibellg@polaroid.com

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Polaroid Digital Products

Service BULLETIN KB# 980428153244JJ

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 2, No. 4

From: New Products Service Support Group
Date: April 23, 1998
Subject: **SprintScan 35 Plus & PolaScan 35 Ultra Controller Board – L3 Defective**

- **Category: Hardware Failure**
  The purpose of this message is to alert telephone support and service providers regarding a potentially defective part on SprintScan 35 Plus and PolaScan 35 Ultra Controller Boards. If the part fails, customers will report error messages related to calibration failures when they try to a scan or preview a slide.

- **Products Affected:**
  SprintScan 35 Plus and PolaScan 35 Ultra

- **Details:**
  Problem: Customers report that when they try to scan or preview a negative (typically, positive scans work OK) they get error messages. Examples:
  - *30000H errors*
  - *Change Light Bulb messages even though bulb is new*
  - *Calibration error message – any type (especially when scanning negatives)*

- **Resolution:**

  Background
  TDK, the manufacturer of inductor L3 (used on SprintScan and PolaScan 35 Ultra Controller Boards) has informed Polaroid Manufacturing that a potential defect in their production process can cause the part to fail prematurely. When L3 fails, the A to D converter loses its power supply. TDK has now changed their production process to fix the defect. Since receiving notification from TDK about the potential defect, our Controller Board manufacturer has taken the following actions:

  1. Purged their inventory of all suspect parts.
  2. 100% screening of L3 beginning in March 1, 1998.
  3. All old stock of L3 has been purged.

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Units affected
All 35 Plus units manufactured between January and February of 1998. The serial number range of these scanners is A8XXXXXC to B8XXXXXC. It should be noted that scanners manufactured before January 1998 could also be affected because TDK could not supply information on the length of time that bad parts were produced.

Failed part identification
Failed parts exhibit an open circuit when measured with an ohmmeter (See Figure 1). You can measure the resistance of L3 from the top of the board by measuring across points 1 and 2 in Figure 1. If L3 is defective it will measure as an open circuit.

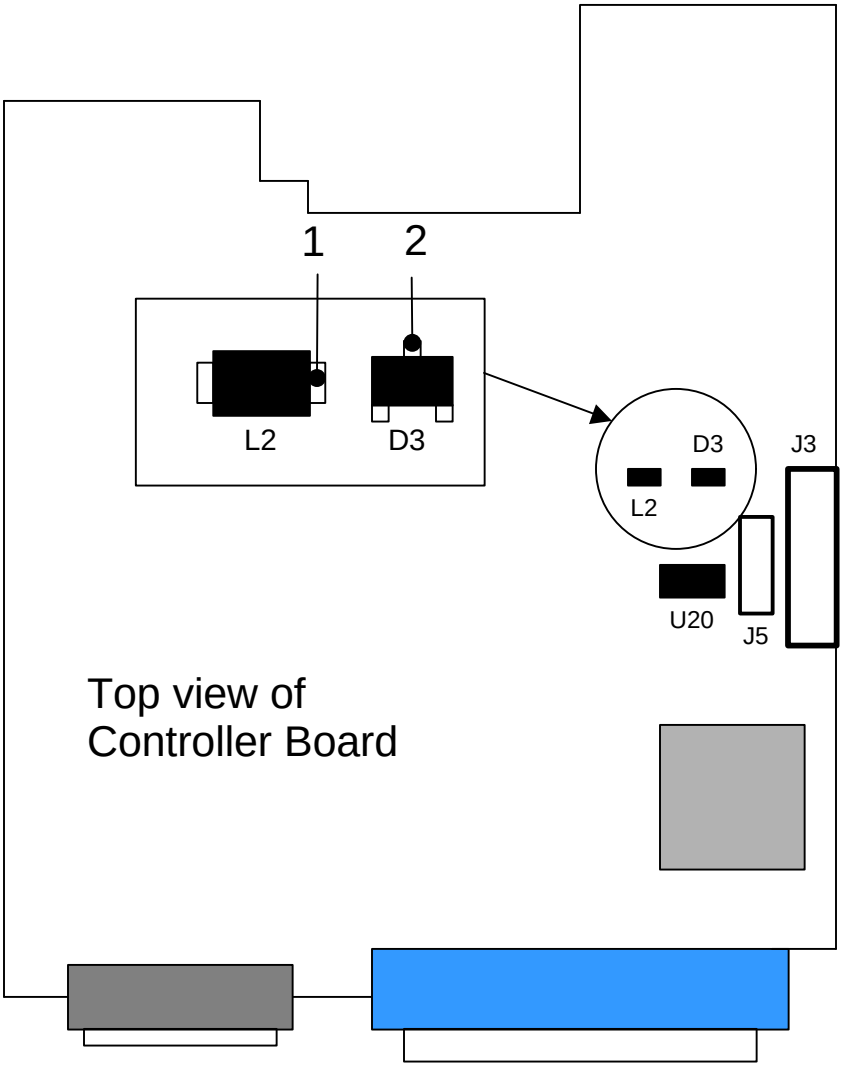

Figure 1 – Top View of Controller Board

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD, Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 980512121625GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 2, No. 5

From: New Products Service Support Group
Date: May 12, 1998
Subject: **SprintScan/PolaScan 35 Plus Firmware Upgrade to V5.94**

- **Category: Product Alert**
  The purpose of this message is to alert service providers regarding a firmware upgrade for the SprintScan/PolaScan 35 Plus.

- **Products Affected:**
  SprintScan 35 Plus and PolaScan 35 Plus

- **Details:**
  - *Beginning May 1998 firmware was upgraded from Version 5.90 to 5.94 for the SprintScan and PolaScan 35 Plus slide scanners. The new version firmware corrects a potential problem of the CCD Config code resetting itself.*
  - *Serial number suffix of scanners containing the NEW firmware is "D"*
  - *Beginning serial number of scanners with NEW firmware: C801487D*

- **Resolution:**

  Background
  First, let's review SprintScan Product Alert 97-2 that talks about SprintScan/Polascan scanners using version 5.90 firmware with new modified CCD boards. When the new modified blue filter CCD board was introduced (beginning with scanner Serial Number F7xxxxC), a feature called the "Config" code (standing for Configuration) was added. The Config code is a way to tell the scanner firmware what type of CCD is being used. You set the Config code by using LabVIEW Image Performance Test or, application software to read and/or change the Config setting. For example, if an older CCD board is replaced in a scanner with a new modified type the Config must be reset from a "0" to a "1.

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The Config setting procedure changes when a Controller Board has the new version 5.94 firmware installed. The 5.94 firmware was changed in one significant way. The Config code is now factory set (when the chip is programmed) to a 1. What this means for service: If a controller board with the 5.94 firmware is replaced on a scanner that has an older type CCD board, you must reset the Config code to a "0." On the other hand, if the scanner has a new modified CCD board you don't have to change the Config since it is, by default, set to a "1."

Changing Config Code
When replacing CCD boards or Controller Boards follow these guidelines:

a) If scanner has OLD CCD board and 5.94 firmware: Change Config to 0
b) If scanner has NEW CCD board and 5.94 firmware: No change to Config

In both instances, check the Config code before returning the scanner to the customer.

Ordering New Firmware
Version 5.94 firmware part number – 1AN312A
New firmware may be ordered from:

Polaroid Corporation
Material Services
201 Burlington Rd
Bedford, MA 01730
Telephone: **800-343-4846 or, (781) 386-5649**
Fax: **(781) 386-5606**
cc:mail: **Parts-Department@Polaroid.com**

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 980513101339GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 2, No. 6

From: New Products Service Support Group
Date: May 13, 1998
Subject: **SprintScan/PolaScan 35 & 35ES New Replacement CCD**

- **Category: Product Alert**
  The purpose of this message is to alert Depot Repair Service providers of a change in the type of CCD that's now available as a replacement part for the SprintScan/PolaScan 35 and 35ES.

- **Products Affected:**
  SprintScan 35 and SprintScan 35ES

- **Details:**
  The Polaroid Parts Department has exhausted its stock of the older type of CCD boards used in the SprintScan 35, 35ES and PolaScan part number 1E6533A. Effective immediately, only new modified blue filter CCD boards part number 1AJ011A will be available. The new modified CCD board must only be installed in scanners with version 1.04 or, higher of firmware. After CCD installation, the customer must upgrade to version 2.7 or higher of the SprintScan software.

- **Resolution:**

Identifying Existing Firmware Revision Level
When you replace an older CCD board with the new modified blue filter type, P/N 1AJ011A, you must first check the scanners' firmware revision level. The revision level must be 1.04 or higher to work correctly with the new CCD. To identify the existing firmware revision level, note what is printed on the label of the existing firmware using the following procedure.

1. Turn off power to the scanner and disconnect the power cord.
2. Remove the top cover of the scanner using instructions in the SprintScan Repair Manual.
3. Identify the Firmware IC U11 on the Controller Board and note the revision level that's printed on an attached label.

If the revision level is current, then you do not need to change the firmware. If not current, change the firmware to the latest version - P/N 1F4699B. You may order this part from the Parts Department (address is listed at end of this Bulletin).

Caution: Firmware is static sensitive, use proper procedures when replacing this part.

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Replacing the CCD Board

Replace the CCD board using the procedure outlined in Section 5 of the *SprintScan Repair Manual*. A copy of the manual can be found on Volume V or, later of the Polaroid Electronic Library CD-ROM. The procedure requires the use of the LabVIEW based IPT test to correctly align the new CCD board. The IPT test software is also used to change the Config code.

To change the Configuration code, perform the following steps:

1. Replace the CCD board using the directions in the *Sprintscan Repair Manual*. Stop at the point where you will use LabVIEW IPT to test the scanner.

2. After starting up the LabVIEW IPT test software, (version 1.02 or, higher) make the following change to the normal test setup procedure.

3. On the main LabVIEW window is a selection box marked “CCD Config.” See Figure 1.

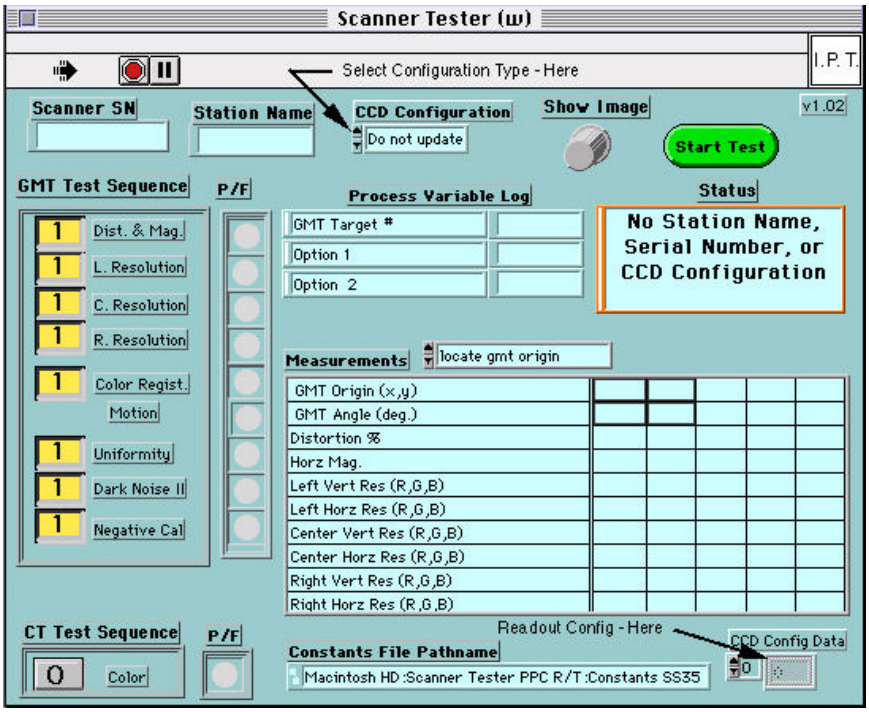

Figure 1

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e) Change the selection to CCD Config 1 - See Figure 2a. When the LabVIEW test cycle runs, the configuration data in the scanner EEPROM will be changed to operate correctly with the new CCD. When the LabVIEW test is complete, the new configuration is reported at the bottom right corner of the scanner test panel as “CCD Configuration.” This window should now read a “1” - see Figure 2b.

Figure 2a

Figure 2b

f) The configuration only needs to be altered once. On subsequent runs of the LabVIEW tester, you may leave the CCD Configuration at “Do Not Update”.

Reading and Changing Configuration Using Application Software
Under certain circumstances, it is possible for the Config code to revert back to a “0” even though it was changed to a “1.” If this happens, scanned negatives will have an undeniable blue hue and positives will have extra saturated blues. The code can be changed in the field using the SprintScan or PolaScan application software. Use method **1)** for a PC or, **2)** for a Macintosh computer.

1) Windows based PC

Reading the CCD Config Code
To change the CCD configuration code in the field you need version 2.7 or higher of the SprintScan application software. You will only need make a configuration change if you have found that the scanner has the modified type Config 1 CCD but, is incorrectly configured for it. The customer will notice that scanned negatives will have an undeniable blue hue and positives will have extra saturated blues.

Start up Photoshop or, the SprintScan Direct application on your PC. You can check the configuration code under the “Help” menu in the Sprintscan 35 Preview window. Select the Help menu and choose “Diagnostics.”

The Diagnostic window, as shown in Figure 3, provides information on the Firmware version and CCD configuration. This example shows that a Config 0 CCD is in a SS35 scanner with version 1.02 of the firmware. Since you have already changed the firmware, you should see that version 1.04 or, later is installed.

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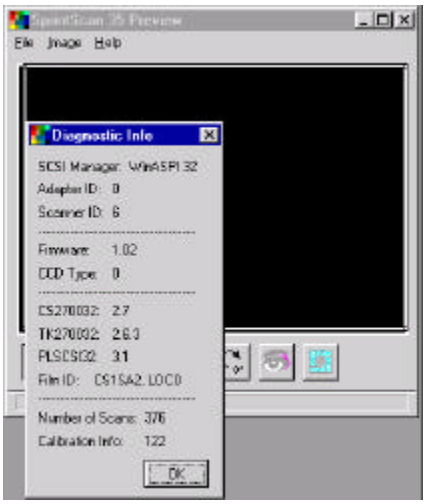

Figure 3

Changing the Config Code

a) Start up SprintScan Direct or Photoshop or application.
b) Make the Sprintscan Control Panel window active.
c) While holding down the "Alt" key, touch the B key on the host computer keyboard. After you see a warning message dialog box about using the Debug function…Cancel it. A new menu choice appears in the Preview window named "Debug." See Figure 4, below.

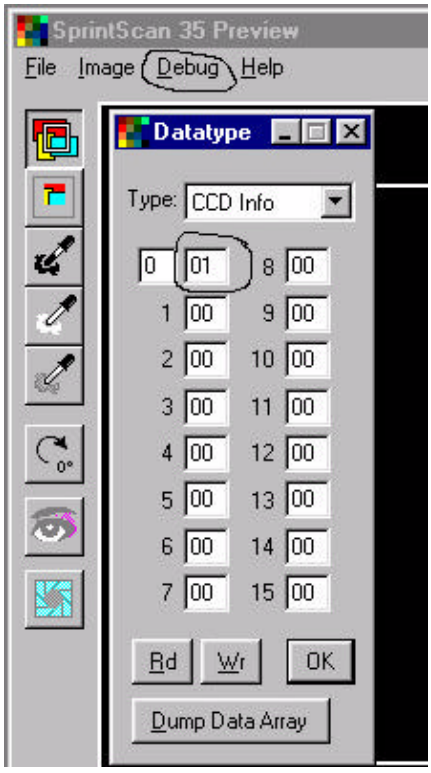

Figure 4

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d) Select “Rd/Wr Datatype” from the choices in the Debug Menu. When the Datatype window appears, choose “CCD Info” from the pop-up menu at the top of the window. The number appearing in the first column at the top left is the CCD type. In the example, shown on Figure 4, the CCD reads out as a 1 indicating that this scanner contains the modified Config 1 CCD.
e) Change the configuration from 1 to 0 or. 0 to 1 by dragging the I - beam cursor through the number that appears and then type in the correct number.
f) After filling in the new Config number touch the “Wr” (Write) button with the mouse pointer to send the new configuration to the scanner EEPROM.
g) Confirm the new configuration, by touching the “Rd” (Read) button with the mouse pointer.
h) Finally, to correctly view the change in a scanned image you must “Exit” the Sprintscan application and re-start the Sprintscan Direct program or, Acquire/Import the scanner in Photoshop. A second method is to select any new Film Type and then re-select the Film Type you want to use. Either method re-initializes the scanner so you can correctly scan with the changed CCD Configuration setting

2) Macintosh Computers

Reading the CCD Configuration Code using the Application Software
Start up the Photoshop on your computer and do an Acquire/Import to bring up the Sprintscan application. At the top of the “Apple” menu (top left corner of your monitor screen) choose “About SprintScan 35…”. The “About” Dialog box appears as in Figure 5.

Figure 5 - Macintosh “About” Box

The numbers reported at the right-bottom of the Dialog box are (reading from top to bottom) the CCD configuration (reported as c0 in our example), the firmware version and the software version.

Changing the CCD Configuration Code using the Application Software
a) Change the configuration number from 0 to 1 or, 1 to 0 by holding down the Option key and single clicking the mouse pointer once on top of the Configuration number. Another Dialog box appears as shown in Figure 6.

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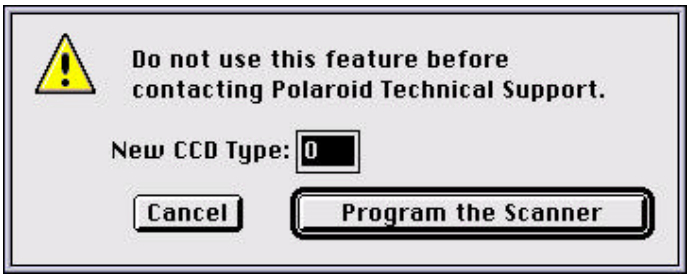

Figure 6 - Macintosh CCD Programming Dialog Box

b) Change the CCD configuration type by typing in the configuration for the CCD that's in the scanner (1 or 0).
c) After filling in the new Config number, touch the "Program the Scanner" button with the mouse pointer or press the Return key. This action sends the new configuration to the scanner EEPROM. To confirm the new configuration select "About Sprintscan 35…" under the Apple menu and read the new configuration number.
d) Finally, to correctly view the change in a scanned image you must "Exit" the Sprintscan application and Acquire/Import the scanner in Photoshop. A second method is to select any new Film Type and then re-select the Film Type you want to use. Either method re-initializes the scanner so you can correctly scan with the changed CCD Configuration setting

PARTS AVAILABILITY

Contact:

Polaroid Corporation
Material Services
201 Burlington Rd
Bedford, MA 01730
Telephone: **800-343-4846 or, (781) 386-5649**
Fax: **(781) 386-5606**
cc:mail: **Parts-Department@Polaroid.com**

Please order from normal sources.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 980515102016GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 2, No. 7

From: New Products Service Support Group
Date: May 15, 1998
Subject: **SprintScan 45 – Defective Power Supply Interconnect Cable**

- **Category: Product Alert**
  The purpose of this message is to alert service providers regarding a potential problem affecting the SprintScan 45.

- **Products Affected:**
  SprintScan 45 and SprintScan 45 Pro

- **Details:**
  Erratic operation of the SprintScan 45 can, in some instances, be caused by a defective power interconnect cable assembly. In two instances, a defective power supply interconnect cable caused the following symptoms:
  - *Flickering lamp (cold cathode fluorescent)*
  - *Erratic motion of the carriage during scanning*

- **Resolution:**
  A single cable assembly connects the power supply of the SprintScan 45 to J4 and J9 on the main circuit board. When symptoms such as a flickering lamp or erratic carriage motion are seen, check and/or replace the power supply interconnect cable. It is suggested that at least one known good cable assembly be on-hand for quick substitution.

  Spare cables can be ordered through normal sources. Order “Cable, Power W/Core” part number AA0212A.

  Polaroid Corporation
  Material Services
  201 Burlington Rd
  Bedford, MA 01730
  Telephone: **800-343-4846 or, (781) 386-5649**
  Fax: **(781) 386-5606**
  cc:mail: **Parts-Department@Polaroid.com**

Contact: Gerald DiBello
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Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 981012132053GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 2, No. 9

From: New Products Service Support Group
Date: October 12, 1998
Subject: **New SCSI Host Adapter for SS35 Plus & LE**

- **Category: New Product Bulletin**
  The purpose of this message is to alert service and telephone support providers regarding a *new* SCSI Host adapter board that will soon be bundled with new SprintScan 35's.

- **Products Affected:**
  SprintScan 35 Plus, SprintScan 35LE

- **Details:**
  As of November 1998 (approximate date), a new PCI Plug and Play SCSI Host Adapter will be bundled with the SprintScan 35 Plus and LE. Specifications for the new board are as follows:

  Manufacturer: Advansys (www.advansys.com)
  Model Number: ABP-922
  PID Number: 629450
  Computer Bus: PCI (Plug and Play)
  SCSI Connector: 25 Pin type D
  Device Protocol: SCSI-1, SCSI-2, Fast SCSI-2
  Device Support: Up to 7 devices
  Features: Multi-tasking, multithreaded I/O, disconnect/reconnect, synchronous and asynchronous data transfer, ASPI compliant
  OS Support: Windows 95 and 98, Windows NT4
  Electrical Termination: Active

  The board package includes *Advansys Super SCSI* on CD-ROM. Applications contained on the CD-ROM: 1) Allow the user to directly connect to the Advansys website to download drivers 2) Do SCSI bus troubleshooting 3) Install drivers for the Advansys 922 board 4) SuperView allows the user to see SCSI devices that are on the bus.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

RIB Document Details

Product:	ProPalette 8000	Date:	11/04/96
Product Type:	Film Recorder	Document #:	961104161822JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:		Received on:	
Film:			

RED FILTER REPLACEMENT

Details, Diagrams

Problem

Some ProPalette 8000 units produce an uneven flat field color. The condition is particularly noticeable when printing black-and-white images on color film. The center of the image is cyan, and the outer edges are magenta. The symptom often results from a defective (out of specification) red filter, and replacing the filter according to the following procedure usually corrects the problem

.Affected Units

This problem has been observed in ProPalette units manufactured before October, 1996. The serial numbers of the units are in the format **K6nnna**. The first character (**K**) indicates the month of manufacture (A -M excluding I), and the second character (**6**) is the year of manufacture.

Required Materials and Equipment

Replacement red filter, part no. 1E6562A
Short Phillips-head screwdriver
Snap-ring removal tool or small pliers
Cotton gloves
Anti-static mat and wrist strap

Filter-Replacement Procedure

CAUTION

Components within ProPalette can be easily damaged by static discharge. Be sure to use the anti-static mat and wrist strap during this procedure.

1. Turn the ProPalette unit on its side and remove the bottom access door (Figure 1).

2. Reach inside the compartment with the short Phillips-head screwdriver to remove the filter wheel blinder (Figure 2).

3. Use the snap-ring removal tool or small pliers to remove the filter wheel snap ring (Figure 2), and remove the filter wheel from its pivot.

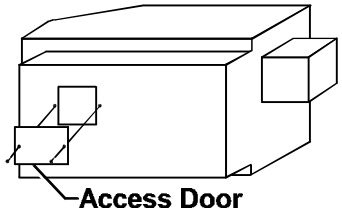

Figure 1. Removing the bottom access door

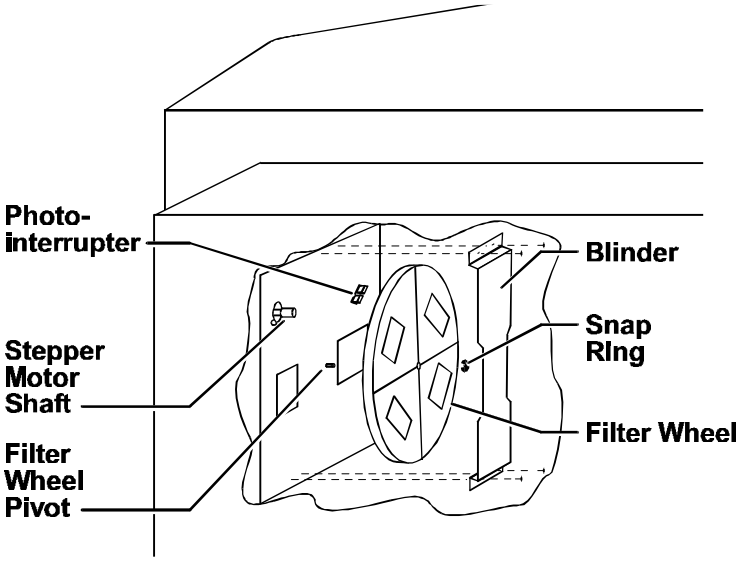

Figure 2. Removing the filter wheel from its pivot

4. Without removing the filter wheel from the compartment, locate the red filter by observing the filter names printed on the filter wheel.

   Note: Upon direct observation, the red filter does **not appear to be red** in color. The filter name indicates the color observed when a white light is viewed through it.

CAUTION

Be sure to wear white cotton gloves when working inside the compartment to avoid fingerprints on the filters and CRT face.

5. Press one of the filter retaining tabs to release the filter (Figure 3) and lift the filter out of the wheel.

6. Insert the replacement filter in the wheel by pressing the tab, positioning the new filter, and releasing the tab.

7. Pivot the spring-mounted stepper motor shaft away from the filter wheel pivot, mount the filter wheel back on the pivot, and release the stepper motor shaft so it contacts the outside of the filter wheel.

   Note: Be sure the filter wheel lip is located in the photo-interrupter slot (Figure 2).

8. Reinstall the filter wheel snap ring on the pivot shaft.

9. Pivot the stepper motor shaft away from the filter wheel and verify that the wheel rotates freely.

10. Clean the filters.

11. Reinstall the filter wheel blinder.

12. Clean the CRT face.

13. Reinstall the bottom access door.

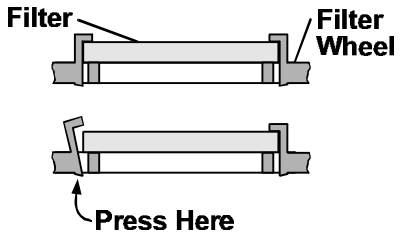

Figure 3. Removing a filter from the wheel

Distribution:

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☒ Int'l Subsidiaries	☐ CPS Operations	☐ Engineering:
☐ Special	☐ CPS Materials	☐ Design:

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RIB Document Details

Product:	**ProPalette 8000**	**Date:**	**01/07/97**
Product Type:	**Film Recorder**	**Document #:**	**970107112250JF**
Product Group:	**DIPS**	**Posted By:**	**Jordan Freedman**
Category:	**Image Quality**	**Received on:**	
Film:			

HORIZONTAL LINES

Details, Diagrams

Some causes of horizontal lines in ProPalette 8000 images

I. Environmental conditions

1. Electromagnetic interference can cause low level horizontal line artifacts. Sources of this are noisy Computer monitors and power supply transformers. For sensitive 4x5 imaging applications the printer should be placed at a distance from
the Computer monitor.

2. Vibration, since the unit takes at least 15 seconds to scan from top to bottom, any significant mechanical vibration can cause horizontal artifacts. This includes someone bumping the table while imaging. A bump usually will cause a pair of colored lines in the image. For example, a gray flat field image if bumped during the red plane will leave a cyan line and a magenta line at the location of the bump. Vibration noise would be uncorrelated from color plane to color plane.

3. Autoluma red lines, if the customer removes the dark slide before the autoluma calibration is complete, then the autoluma scans will be superimposed on the image. There would be widely separated red lines in the image in this case.

II. Unit construction

1. The parallel port connector screws must always be installed after reworking a unit. It is tempting to leave them out, especially if you can't find the proper tools. These screws connect the circuit board ground to the chassis ground, which eliminates ground noise from the image, especially when imaging with the SCSI port.

Distribution:

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Product Alert Bulletin Polaroid **Knowledge*Base**

PA Document Details

Product:	**ProPalette 8000**	**Date:**	**01/14/97**
Product Type:	**Film Recorder**	**Document #:**	**970114162151JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**	**Received on:**	
Film:			

ADOBE 4.0 & WIN95 SOFTWARE ERROR

Details, Diagrams

PROBLEM

A problem exists between the latest version of Adobe Photoshop ver. 4.0 and Palette Export for Win95. The second time that an image is outputted, the application will abort with a Memory Access Violation, the PC will continue to operate. This problem is not apparent with earlier versions of Photoshop or Windows.

CAUSE

This is caused by a bug in the version 4 software from Adobe. The memory stack is corrupted because an internal index register in the CPU is improperly overwritten.

SOLUTION

Until a solution is provided by Adobe there are two alternative solutions to the problem. The first would be to revert to an earlier version of Adobe Photoshop. The second would be to not use Palette Export but to print out through the queue of RasterPlus 95.

Distribution:

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Product Alert Bulletin Polaroid K...ledge*B...

PA Document Details

Product:	**CI-5000S, HR-6000 CFR, ProPalette 8000**	**Date:**	**01/16/97**
Product Type:	**Film Recorder**	**Document #:**	**970116084902JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware, Software**	**Received on:**	
Film:			

PARALLEL PORT PROBLEMS

Details, Diagrams

Situation:

Certain parallel port configurations on a limited number of Windows 95 computers will not communicate with Palette film recorders that are attached via the parallel port. RasterPlus95 has been revised to build 46 to provide a solution for this issue.

Actions/ Solutions:

If you have experienced any difficulty attaching your Palette film recorder to your PC via the parallel port, you may need to upgrade your RasterPlus95 software to build 46. Alternatively, you may wish to attach your Palette film recorder to your PC via the SCSI port.

Upgrades for RasterPlus95 to build 46 can be obtained by contacting David Hemingway at Polaroid in Cambridge, Massachusetts, USA. Please call (617)386-3511, ccMail, or email David at hemingd@polaroid.com. In the US, disk sets can be obtained by calling Polaroid Technical Support at (800)432-5355.

NOTE: If you use the SCSI port to connect your Palette film recorder to your PC, it is not necessary to upgrade your RasterPlus95 software from build 43 (the previous release) at this time.

Distribution:

APPROVALS:

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 8000**	**Date:**	**02/27/97**
Product Type:	**Film Recorder**	**Document #:**	**970227160743JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software, Installation**		

RASTERPLUS95 SCSI ERRORS

Details, Diagrams

Problem:
After installing RasterPlus95 on a desktop PC running under WIN95, RasterPlus95 does not see the ProPalette as a SCSI device and returns a "busy, disconnected or off" status when trying to produce an image through the SCSI port. The ProPalette was seen and identified correctly during the computer boot process. When the parallel port is picked as the output port, the ProPalette is on-line.

Reason:
The Queue Property configuration item "SCSI Adapter #" must reflect the location of the SCSI host adapter that supports the ProPalette.

Solution:
Use a SCSI utility, like EZSCSI from Adaptec, to determine how many SCSI buses are present on the computer. For example the CD drive on a Sound Blaster card is resident on it's own SCSI host adapter and occupies a number. A subsequent SCSI card will reside as the second SCSI adapter. Properly identify the number of the host adapter that supports the ProPalette.

In RasterPlus95, go to Queue Properties. Under the Device tab, click on Options. At the bottom of the screen is a field labeled "SCSI Adapter #" Select the number that corresponds to the adapter that contains the ProPalette. In this case, set the number to "1" because the ProPalette is resident on the second host adapter, the first adapter supporting the CD drive is 0.

Save these settings by clicking OK. Ensure that the SCSI id number and bus termination are correct. The ProPalette should now be on-line.

Distribution:

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Software Info Bulletin Polaroid **Knowledge*Base**

SIB Document Details

Product:	**CI-3000S, CI-5000S, HR-6000 CFR, ProPalette 8000**	**Date:**	**03/18/97**
Product Type:	**Film Recorder**	**Document #:**	**970318125619JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**	**Received on:**	
Film:			

MULTIPLE CFR INSTALLATION

Details, Diagrams

Subject / Situation:

Palette for Macintosh, the Chooser level driver for Palette film recorders, provides three possible installations; one for the CI-5000S, the HR 6000(SE), and the ProPalette 8000. If multiple installations are performed on the same computer and a different model film recorder is selected during one of the additional installations, the resulting Polaroid Film Tables directory contains a mixture of CI, HR, and/or Pro8 film tables.

This will work fine for Palette for Macintosh Chooser level driver and Si Print Assistant, the batching utility. The problem exists when Palette Export for Macintosh, the Photoshop Plug-in, is used. Palette Export will report that the Polaroid Film Tables directory can not be found. This error message is incorrect. Actually, the directory exists, but has "unknown" film tables contained within.

Products Affected:

ProPalette 8000
HR 6000(SE)
CI-5000S
Palette Export for Macintosh v1.1.5
Palette for Macintosh v4.0.2

Actions/ Solutions:

If Palette Export for Macintosh reports: "Polaroid Film Tables directory can not be found," discard the Polaroid Film Tables directory found inside the System folder of the Macintosh. Re-install the Palette for Macintosh drivers for the Palette model that is going to be used. If a different Palette film recorder will be used on this same system at a later date, it will be necessary to place the existing film tables into a temporary directory to "hide" them from Palette Export, and then perform a Palette for Macintosh installation for the new film recorder

model.

NOTE: This only affects Palette Export for Macintosh and will only affect resellers, sales people, and product demonstrators that are most likely to use more than one Palette film recorder model on their Macintosh.

Distribution:

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Software Info Bulletin Polaroid **Knowledge*Base**

SIB Document Details

Product:	**ProPalette 8000**	**Date:**	**04/23/97**
Product Type:	**Film Recorder**	**Document #:**	**970423083038JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**	**Received on:**	
Film:			

PAGE SIZE FOR FILM RECORDERS

Details, Diagrams

The purpose of this Technical Application Note is to provide a guide for obtaining the correct aspect ratio image for the format of the film you are exposing on your Polaroid Palette film recorder. Using these methods will help you avoid using interpolation (fabricating data) to correct the size the image. Following this procedure will ensure that you obtain the sharpest output possible by utilizing Polaroid's programmable resolution feature of the Palette color film recorders.

The complete Word formatted file is attached.

sizing.doc

Distribution:

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Product Alert Bulletin Polaroid **Knowledge*Base**

PA Document Details

Product:	**R-6000**	**Date:**	**05/27/97**
Product Type:	**Film Recorder**	**Document #:**	**970527134404JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**	**Received on:**	
Film:			

MOUNTING SCREWS

Details, Diagrams

PROBLEM
Production of R6000 camera from 4/4/97 to 5/13/97 have too much paint on the thumb screws which causes a tight fit when mounting the camera.

SOLUTION

To remedy the problem, run the thumb screws through a 1/4-20 machine die. This will clean out the excess paint in the threads. There is no need to remove the thumb screws from the camera to clean them.

Distribution:

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Repair Info Bulletin **Polaroid Knowledge*Base**

RIB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**06/03/97**
Product Type:	**Film Recorder**	**Document #:**	**970603082047JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**	**Received on:**	
Film:			

NON-REPEATABLE ERRORS

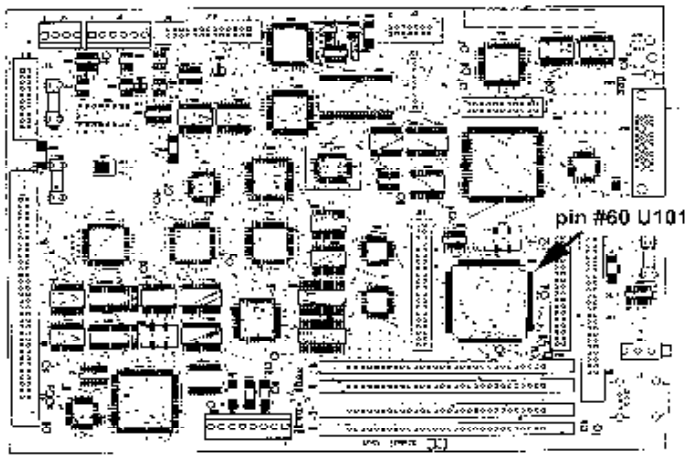
Details, Diagrams

Subject / Situation:

A limited number of Digital circuit boards (1F5570A) have been found to have either an unsoldered pin or cold solder joint on pin #60 of U101. The product will exhibit intermittent non-repeatable errors. See diagram below for location of U101 and orientation of pin #60.

Actions/ Solutions:

The integrated circuit should be inspected and the problem verified. If the fault is found and the repair center is a qualified surface mount repair facility, the pin should be re-soldered. If there is any question about the ability to repair the solder joint, the board should be replaced and the product calibrated.



Distribution:

APPROVALS:

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**HR-6000 CFR, ProPalette 7000, ProPalette 8000**	**Date:**	**06/11/97**
Product Type:	**Film Recorder**	**Document #:**	**970611161412JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Information**		

PALETTE HELP FILES

Details, Diagrams

Subject / Situation:

Several new self-help files have been added to Polaroid's FTP site on the Internet. These files include film table lists, common questions and answers, software driver information, product specifications and descriptions, and trouble shooting tips.

For the best results from your Palette color film recorder, please access and use this information.

Actions/ Solutions:

The easiest way to get to Polaroid's FTP Internet site is from the World Wide Web site. From Polaroid's Home page (www.Polaroid.com), please click on Software Drivers and Film Table Files at the bottom of the ProPalette 8000 More Info page.

This procedure will bring you directly to the ProPalette 8000 section of Polaroid's FTP Internet site. The Palette Information file names are as follow:

PALETQNA.DOC	(Palette Questions and Answers)
PRO8INFO.DOC	(ProPalette 8000 Information)
MACINFO.DOC	(Palette for Macintosh Information)
RP95INFO.DOC	(RasterPlus95 Information)
TROUBLE.DOC	(Palette Troubleshooting Information)

NOTE: These files are formatted for MSWord v7.0.

trouble.doc PaletQnA.DOC pro8info.doc rp95info.doc macinfo.doc

Distribution:

APPROVALS:

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Software Info Bulletin Polaroid **Knowledge*Base**

SIB Document Details

Product:	**ProPalette 8000**	**Date:**	**06/11/97**
Product Type:	**Film Recorder**	**Document #:**	**970611160418JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**	**Received on:**	
Film:			

COLOR TUNE

Details, Diagrams

Subject / Situation:

Palette ColorTune, a film tables utility for matching the computer monitor to the film output of a ProPalette 8000, is currently available on Polaroid's FTP site. Both Macintosh and Windows 95 versions are available.

Actions/ Solutions:

The easiest way to get to Polaroid's FTP Internet site is from the World Wide Web site. From Polaroid's Home page (www.Polaroid.com), please click on Software Drivers and Film Table Files at the bottom of the ProPalette 8000 More Info page.

This procedure will bring you directly to the ProPalette 8000 section of Polaroid's FTP Internet site. The Palette ColorTune files are called CTWIN95 and CTMAC. Documentation is available in a MSWord v7.0 formatted file.

NOTE: Palette ColorTune is compatible with the ProPalette 8000 film recorder ONLY.

CTWin95.EXE

CTMac.hqx

colrtune.doc

Distribution:

APPROVALS:

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Repair Info Bulletin **Polaroid Knowledge*Base**

RIB Document Details

Product:	**ProPalette 8000**	**Date:**	**06/13/97**
Product Type:	**Film Recorder**	**Document #:**	**970613160125JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**	**Received on:**	
Film:			

LOW INPUT VOLTAGE

Details, Diagrams

Subject / Situation:

In regions of the world where the input line voltage can fall under 100 Vac, the ProPalette has a safety feature (Power Fail signal) that will shut off the CRT. This was designed to prevent phosphor burns on the CRT caused by unregulated low voltages. As delivered, the Power Fail signal from the Low Voltage power supply trips at approximately 95 Vac.

Actions/ Solutions:

This Power Fail signal must be adjusted prior to sale in these regions. Potentiometer R32 on the Low Voltage power supply controls the trip point of the Power Fail signal. With the R32 potentiometer in the full clockwise position, the Power Fail signal line trips at approximately 75 Vac. The low voltage outputs remain in regulation down to 62 Vac. There is no indication of flashing CRT at power levels from 90 to 240 Vac.

The recommended procedure is to remove the Electronics Draw from the ProPalette to gain access to the Low Voltage power supply. Looking at the power supply as it is mounted on the Electronics Draw, R32 is a small circular potentiometer mounted on the PC board located below a transformer in the lower right corner of the assembly. No electrical measurements are necessary during the adjustment, just turn the control fully clockwise and re-assemble.

All units manufactured after June 1997 will have this adjustment performed prior to shipment.

Distribution:

APPROVALS:

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Product Alert Bulletin Polaroid **Knowledge*Base**

PA Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**07/10/97**
Product Type:	**Film Recorder**	**Document #:**	**970710154500JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware, Software**	**Received on:**	
Film:			

IMAGE SPACING

Details, Diagrams

Problem:

A small group of ProPalette's were delivered to Distribution that might exhibit an uncertainty in the inter-frame gap on 35 mm film. This problem is a result of a planned improvement to the Richo camera back used in the ProPalette and manifests itself with inconsistent spacing between the images.

Reason:

The suspect camera can be identified by the color of the printed circuit board material that supports the contacts that provide the interface between the camera and the ProPalette. A brown board was used on the earlier design camera and will not exhibit the problem. A green board is used on the newer design and will exhibit the problem dependent on the date of the firmware release.

Solution:

Firmware, ver. 562 dated May 23 1997 for the ProPalette 8000 and ver. 702 dated April 29 1997 for the ProPalette 7000 is subject to the failure. An interim release to the firmware, ver. 562 dated July 8 1997 for the ProPalette 8000 and ver. 702 dated July 1 1997 for the ProPalette 7000, will resolve the problem. The version date can be determined by selecting "Diagnostics/Power On Message" from the ProPalette LCD display.

Any unit that has a serial number with the format 8G7*nnna* for the ProPalette 8000 or 7G7*nnna* for the ProPalette 7000 will have the correct firmware installed.

Distribution:

APPROVALS:

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**07/29/97**
Product Type:	**Film Recorder**	**Document #:**	**970729141654JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

UNKNOWN EXTENDED SENSE ERROR

Details, Diagrams

Problem:

A user will report the occurrence of an "Unknown Extended Sense Error" being displayed by the application software while printing to a ProPalette.

Reason:

This message is reported by the application when an "unknown" error is reported back on the SCSI bus from the ProPalette. An unknown error is only an error which has an id number not listed in the driver's database of errors.

Solution:

When the software reports Unknown hardware error, the hardware has the issue stored in the diagnostics area. On the ProPalettes, use the keypad, go to diagnostics; show last error. Record the message that is displayed.

Sometimes Diagnostics/show last error gives us a secondary or derivative error that masks the original error. A way around this is to keep an eye on the LCD and try to record the original error before it gets "bumped" by subsequent errors.

The "last error" record is stored in DRAM and survives until a new error occurs or the unit is reset. If there have not been any errors since the unit was last turned on the LCD will say "Unit just powered on".

Distribution:

APPROVALS:

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☐ Special	☐ CPS Materials	☐ Design:

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Product Alert Bulletin Polaroid **Knowledge*Base**

PA Document Details

Product:	**ProPalette 8000**	**Date:**	**08/26/97**
Product Type:	**Film Recorder**	**Document #:**	**970826112926JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**	**Received on:**	
Film:			

COLOR FRINGING

Details, Diagrams

Situation:

A small group of ProPalette 8000's were delivered to Distribution that might exhibit color fringing along the right side of the image. It will become apparent when non-standard image resolutions are processed. This problem is a result of test firmware that was not upgraded in the unit prior to shipment. The firmware is identified as version 562 dated April 25, 1997. The firmware date can be determined by selecting "DIAGNOSTICS/SHOW POWER-ON MESSAGE" from the ProPalette keypad.

Solution:

The released firmware version 562 dated May 23, 1997 does not exhibit this problem. All ProPalette 8000 Digital Printers should be updated to the correct firmware version at this time.

Polaroid's FTP site on the Internet has two files that contain the correct version 562 firmware.

http://ftp.polaroid.com/pub/imaging/output/cfrecord/prop8000

Currently the easiest way to get to the FTP site is from Polaroid's home page. Please follow these steps for easy access to Polaroid's FTP site:

1. Internet access to Polaroid's home page is at: www.Polaroid.com
2. From the home page, press the Products button.
3. From the Products page, press the Color Film Recorders button.
4. From the Color Film Recorders page, press the More Info button under ProPalette 8000.
5. At the bottom of the ProPalette 8000 Information page, press Software Drivers and Film Table Files.

This method will bring you directly to Polaroid's FTP site, a storage area for the very latest ProPalette 8000 information including film tables, software upgrades, firmware upgrades, and self-service documentation files.

For Macintosh, access file PRO8V562.hqx. For PC/Windows, access file PRO8V562.EXE. Both files are self-extracting. Double-click to open them and read the README.TXT file for important information before beginning. NOTE: The Macintosh installer requires that the ProPalette 8000 is set to SCSI ID #4.

Distribution:

APPROVALS:

☒ Int'l EXP	☐ CPS Tech Services	☐ Manufacturing:
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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 8000**	**Date:**	**08/26/97**
Product Type:	**Film Recorder**	**Document #:**	**970826123156JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Image Quality**		

SERVICE REQUIRMENTS

Details, Diagrams

Problem

It is recommended that all EI Service Centers periodically evaluate the quality of a ProPalette 8000 repair by producing an image suite on 4 x 5 media in addition to the normal 35 mm media. Since some artifacts are not apparent in the 35 mm size, all customers who claim to use the 4x5 format should have their unit processed with that size.

Additional Equipment

The following additional equipment will be required to support this effort, the last three items are commercially available:

Polaroid 4x5 camera back for ProPalette 8000 (PID 621080)
4 x 5 sheet film holders
Kodak Ektachrome 100 Plus Professional 4x5 Sheet Film "EPP"
Dark room or changing bag equivalent

Additional Skills

In addition to training the service personnel with the skills to handle the additional film format, the film processing facility must be able to handle the additional size.

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 8000**	**Date:**	**09/05/97**
Product Type:	**Film Recorder**	**Document #:**	**970905091846JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

HARDWARE UPGRADE

Details, Diagrams

The following circuit board assemblies have been updated in the ProPalette 8000.

	From	To
Analog PCB Assembly	1D9710A	1AH823A
Digital PCB Assembly	1D9575A	1F5570A

These changes reflect the latest build (revision J) of this product. Please update all of your documentation.

Distribution:

APPROVALS:

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- ☐ CPS Materials
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- ☐ Engineering:
- ☐ Design:

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EISB Document Details

Product:	**ProPalette 7000**	**Date:**	**09/15/97**
Product Type:	**Film Recorder**	**Document #:**	**970915151919JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

SIZING ERRORS

Details, Diagrams

PROBLEM:

Recently there have been alignment sizing problems with the ProPalette 7000 product. It has been discovered that incorrect resistors as specified by the most recent BOM are being installed in the boards.

REASON:

During manufacturing pilot (Spring '97) it was discovered that the center point of the sizing process required movement, and as a result R56, R55, R108 of the vertical channel and R6 of the horizontal channel were changed. These changes were found to fix the sizing problems. These changes were incorporated as an ECN, which is released.

The PCB manufacturer apparently is still using the original BOM to build the ProPalette 7000 analog board, which explains why the sizing problems have reappeared. Units that have been shipped and passed the initial sizing adjustment pose no risk for customer returns. Units that may have failed sizing on the first try and passed with a subsequent attempt may cause in some instances an image smaller than desired by the customer (equivalent to a sizing failure). The fix for this would be to replace the incorrect resistor values with the correct ones.

SOLUTION:

To determine if the correct resistors are installed, look at R55 and R108 which are power resistors near the top of the unit near the analog board heat sink. If these resistors are labeled 47 ohms, then the wrong values have been installed, if they are labeled 40 ohms, the correct values have been installed.

The proper values must be installed according to the following chart:

	Correct values	**Incorrect values**
Vertical channel		
R56	301 ohms, 1 %	0 ohms
R55	40 ohms, 3W	47 ohms, 3W
R108	40 ohms, 3W	47 ohms, 3W
Horizontal channel		
R6	2.49K, 1%	3.92K, 1%

Manufacturer Part numbers:

R6	Rohm	MCR18F2491
R56	Rohm	MCR18F3010
R55 & R108	Ohmite	43F40
or	Memcor-Truohm	SL340

Distribution:

APPROVALS:

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- ☐ Manufacturing:
- ☐ Engineering:
- ☐ Design:

Repair Info Bulletin **Polaroid Knowledge*Base**

RIB Document Details

Product:	**R-6000**	**Date:**	**10/01/97**
Product Type:	**Film Recorder**	**Document #:**	**971001105844JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Firmware**	**Received on:**	
Film:			

VARIABLE FRAME SPACING

Details, Diagrams

PROBLEM:

It was discovered that the R6000 35mm camera for the HR/CI family of film recorders was occasionally skipping a perforation between frames on 36 exposure rolls of film.

REASON:

The analysis of failed cameras reveal a timing problem in the microprocessor firmware, version 1.3, due to the variable motor torque requirement for the 36 exposure film.

SOLUTION:

The problem has been addressed and a new version of firmware has been generated. The new firmware is installed by replacing the microprocessor on the logic board (1E8210A) with the part R6000 Programmed Micro ver 1.4 (p/n AA0095 issue 03). This item is socket mounted on the logic board, ensure proper orientation when inserting the new device.

The new firmware, version 1.4, has two added features and a requirement as listed below:

Requirement:

When version 1.4 is installed into a camera back the "self-test" must be run. The "self-test" performs two functions, it identifies the camera back version and initializes the counters in eeprom.

> NOTE: Since the identification process uses the perforation sensor to determine which camera is attached the operator must ensure that the perforation sensor is free from any obstructions. Make sure there is no film in the camera when the "self-test" routine is initiated.

Feature:

1. When the "self test" routine is started a hexadecimal cycle counter will be flashed on the LCD as a record of how many cycles the camera has performed in it's lifetime beginning with this firmware release.

ex:

Hex	Decimal	
00B0	176	cycles

2. On power up the version of the firmware will be displayed.

To order parts; indicate part number, full part name and quantity desired. Give exact shipping instructions and complete shipping and billing address. Address all parts orders to:

Polaroid Corporation
Material Services Department
201 Burlington Rd.
Bedford MA 01730

Distribution:

APPROVALS:

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**11/18/97**
Product Type:	**Film Recorder**	**Document #:**	**971118134903JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:			

INVALID INITIALIZATION TEST MESSAGES

Details, Diagrams

PROBLEM:

With 562/702 and earlier firmware, a ProPalette may occasionally display a false Vertical or Horizontal Test failure during the startup diagnostics.

REASON:

These failures may be due to noise in the sensing circuitry rather than in the high precision deflection circuitry being measured.

SOLUTION:

Before authorizing a service return please have the customer confirm that the failure is repeatable.

Distribution:

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Product Alert Bulletin Polaroid **Knowledge*Base**

PA Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**11/19/97**
Product Type:	**Film Recorder**	**Document #:**	**971119141308JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware, Software**	**Received on:**	
Film:			

SWERR ERROR MESSAGE

Details, Diagrams

Subject / Situation:

On certain Windows PCs running at processor speeds of 200MHz or above, like a Pentium 200, 233, and 266, Palette Export can cause software errors (SWERR) to appear on the ProPalette 7000 and ProPalette 8000 LCD panel. This error is the result of the software failing to check the ProPalette's memory availability and sending image data faster than the ProPalette can respond to say that it is not ready (full).

NOTE: This has been reported on PC platforms that have processor speeds at 200MHz and above.

Products Affected:

ProPalette 8000
ProPalette 7000
Palette Export for Windows 95 v1.3.0

ctions/ Solutions:

Polaroid is revising Palette Export for Windows 95 v1.3.0 to correct this problem with fast PC platforms. The revised version of Palette Export will be made available on Polaroid's FTP site. Another technical bulletin will be created to alert you when the new version of Palette Export is available.

Distribution:

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EI Service Bulletin

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EISB Document Details

Product:	**ProPalette 7000**	**Date:**	**11/25/97**
Product Type:	**Film Recorder**	**Document #:**	**971125164625JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:			

HI VOLTAGE POWER SUPPLY

Details, Diagrams

Problem:

Almost all of the ProPalette 7000 high voltage power supplies manufactured between June and September '97 have difficulty starting at 28V. This is within the acceptable range of the power supplied by the low voltage power supply

Reason:

The vendor agrees that the design was not robust enough for the variation in components. The date code is embedded in serial number in the format (yymmxxx).

Solution:

All ProPalette 7000's with start up problems or non-repeatable failures should be checked for HV Power Supply compliance. All those units that are affected should go back to Service for repair. The unit must be re-aligned at a qualified Service Center after a replacement of the high voltage power supply.

Distribution:

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EI Service Bulletin

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EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**12/22/97**
Product Type:	**Film Recorder**	**Document #:**	**971222095003JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

MAC OS8

Details, Diagrams

Subject / Situation:

Palette for Macintosh v4.1.2 software was released internally by Polaroid today. This new version of the Palette film recorder driver software is compatible with Apple's new operating system, System 8 (OS8) and backward compatible with System 7. The software kits (shown below) will include a new CD-ROM disk that contains the following:

Palette for Macintosh driver software version 4.1.2 (System 8 compatible)
SI Print Assistant version 3.0.6 (System 8 compatible)
Palette Export for Macintosh version 1.4.0 (unchanged)
Palette ColorTune for Macintosh version 1.0 (unchanged, ProPalette 8000 only)

Steps currently required to make this new software available in inventory are CD-ROM mastering, duplication, and kitting. As a result, the Macintosh OS8 Software Upgrade kit will be available in inventory during the week of January 5. The Macintosh OS8 Kits for All Palettes will be available in inventory during the week of January 12.

NOTE: These new kits utilize the same Polaroid Identification (PID) numbers as the current kits. The kit labels distinguish between the current (System 7) version 4.0.4 software and the new version 4.1.2. The new labels have "OS8" added to the kit name label and contain version 4.1.2. Please specify when ordering.

Products Affected:

623879 Macintosh **OS8** Kits for All Palettes
623946 Macintosh **OS8** Software Upgrade – All Palettes

ctions/ Solutions:

Polaroid's FTP site on the Internet contains a file named PATCH412.HQX. This file provides a free upgrade from version 4.0.2 (distributed on diskette only) and version 4.0.4 (available on CD-ROM only) to version 4.1.2. This software patch requires either version 4.0.2 or 4.0.4 to be installed fresh and includes a README.TXT file with instructions for performing the software upgrade. Please make certain to follow these installation instructions carefully.

Distribution:

APPROVALS:

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EI Service Bulletin

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EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**01/29/98**
Product Type:	**Film Recorder**	**Document #:**	**980129161012JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Alignment Error

Details, Diagrams

Problem:

A single large white spot or two may be visible in the upper right quadrant of the face of the CRT during geometry alignment. It is likely that the alignment process will fail because of the image artifact.

Reason:

The spots are a result of the filter wheel sensor emitting infrared light that reflects off the CRT and is picked up by the alignment camera.

Solution:

It's possible to mount the sensor in either of two orientations and still have the proper functionality. If the sensor is mounted in a way that has the emitting side of the sensor on the outside of the filter wheel the dots would appear. When that same sensor is reversed the dots disappear. The easiest solution is to re-mount the sensor so as to have the emitting side of the sensor is behind the filter wheel and unable to reflect off the face of the CRT.

Remove the filter wheel sensor and position it such that blue/green wire pair are pointing down toward the bottom of the film recorder. This will ensure the correct orientation. All film recorders manufactured after 15 December 1997 will have the proper placement.

Distribution:

APPROVALS:

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EI Service Bulletin

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EISB Document Details

Product:	**ProPalette 8000**	**Date:**	**02/27/98**
Product Type:	**Film Recorder**	**Document #:**	**980227140811JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Image Quality**		

4x5 Focus

Details, Diagrams

Problem

There have been reports of soft focus on one side of the image for some ProPalette 8000's that have a 4x5 camera attached.

Reason

There can be an interference in the mounting of the 4x5 camera back caused by the toe of the mounting bolt that is used to hold the 35 mm camera mounting mechanism. The intermittence of the problem is caused by normal manufacturing variations in the bolt length.

Solution

A "nipping" tool will be provided to the authorized repair centers. This tool will remove the excess length of the bolt. All 4x5 camera's in US inventory will be modified to provide a clearance hole for the bolt.

Distribution:

APPROVALS:

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Software Info Bulletin Polaroid **Knowledge*Base**

SIB Document Details

Product:	**HR-6000 CFR, ProPalette 7000, ProPalette 8000, Raster Plus 95**	**Date:**	**02/27/98**
Product Type:	**Film Recorder**	**Document #:**	**980227160439JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**	**Received on:**	
Film:			

PowerPoint & Win NT

Details, Diagrams

Subject / Situation:

Printer driver settings for PowerPoint from Office 97 will not stay after the program has been closed. Occurs under Windows NT only when running RasterPlus 95. The resulting error message is "Wrong camera back installed"

Products Affected:

All CFR's running Raster Plus Software under NT

ctions/ Solutions:

To make the printer driver retain the settings for use with any program (I.E. PowerPoint, Freelance Graphics etc.) Follow the steps listed below:

Go to the start menu and choose "Printers" from the settings choice
Select (highlight) the Polaroid digital palette driver currently installed
Go to the file menu and choose "Document Defaults"
In the new window, choose the Advanced Tab
Under Paper size, select Powerpoint 35mm if using a 35mm back.
Select the correct film type for your camera back under the printer features section.

The palette driver should retain these settings and apply them correctly each time you open Powerpoint and choose to print.

Distribution:

APPROVALS:

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EISB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	03/10/98
Product Type:	Film Recorder	Document #:	980310095621JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Image Quality		

Horizontal Lines

Details, Diagrams

Problem

The occurrence of horizontal lines across the image of a ProPalette can be the result of several problems. Several of the major reasons are discussed here.

Solution

A slow host computer may force the ProPalette to wait for data during a line scan. This will result in a regular pattern of dark lines within the image. To eliminate this problem, Pacing should be enabled on the LCD panel. This will insert a user-defined wait between scan lines allowing the host computer to process the necessary image data. The amount of pacing should be increased in small steps until the data wait lines have been eliminated. An excessive pacing time will increase the total exposure time of the entire image.

Horizontal lines across image can be caused if the CRT scan light blinks on and off due to a slow (or busy) host computer. One way to check for this is to expose the image that exhibits the problem with some dummy film and once the exposure starts remove the camera from the front of the unit. Look in at the CRT and see if the scan is blinking on and off. If so, the fix is to increase the Pacing value via the keypad. Try to use the same image and printing conditions that produced the problem.

Make certain that the computer that the film recorder is connected to is completely DEDICATED to imaging with the ProPalette. Every time a message comes in, or a key is pressed, or Appleshare is polled, this causes a software interrupt in the CPU. These interrupts borrow time from the process of processing the image for the film recorder. If the film recorder has to wait for image data, "data wait" lines can appear on the film.

Check to make sure that no other electrical devices are close enough to the unit that could cause electro-magnetic interference. Monitors and electric motors are common culprits. Never stack film recorders. Never run a film recorder back-to-back with the computer's monitor or CPU.

Check to make sure that the surface used to hold the film recorder is vibration free. This is particularly important with the medium format and 4x5 camera backs. The 4x5 camera should never be used without bolting it to the ProPalette. Banging on the surface during exposure will cause image artifacts.

Ensure that the computer (CPU) and the film recorder are plugged into the same power outlet and share a common ground to eliminate the possibility of a ground-loop problem.

Distribution:

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EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**03/25/98**
Product Type:	**Film Recorder**	**Document #:**	**980325134018JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Digital Board - Jumper Configuration

Details, Diagrams

Subject/Situation:

There are four jumper blocks on the ProPalette Digital board (1F5570A). There are designated as:

JP201	JP202
JP501	JP601

At the present time, only JP501 has any functionality associated with it. This jumper controls the Watchdog timer that prevents power on initialization errors.

Action/Solution:

JP501 should be set according to the following table. Normal usage is to enable the circuit.

	Pin 1 – 2	Pin 2 - 3
JP501	Disabled	Enabled

Distribution:

APPROVALS:

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- ☒ Int'l Subsidiaries
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EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**03/24/98**
Product Type:	**Film Recorder**	**Document #:**	**980324102437JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

ESD Damage

Details, Diagrams

Products Affected:

ProPalette 7000
ProPalette 8000

Subject / Situation:

The Manufacturing line has experienced a high failure rate of capacitors and active circuits on the entire ProPalette line. While monitoring one of the power supply lines some substantial ESD transients were observed whenever the operator adjusted the yoke of the CRT during “Functional” test. The measured voltages were bipolar with a total range as high as 55v.

Cause / Reason

These components are not qualified to be subjected to negative voltages and are not rated for the stress they are receiving. Additionally, the flash memory was corrupted sporadically during this operation and is probably an ESD related problem also. It was determined that when the neck clamp of the yoke was grounded the ESD transient was eliminated.

Actions / Solutions:

The operator should “ground” the metal yoke neck clamp, before AC power is applied, whenever the yoke is adjusted during assembly and testing. The earth ground connection at the green wire should be the reference point. The operator should also wear ESD protection during the adjustment process

Distribution:

APPROVALS:

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EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**03/25/98**
Product Type:	**Film Recorder**	**Document #:**	**980325134018JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Digital Board - Jumper Configuration

Details, Diagrams

Subject/Situation:

There are four jumper blocks on the ProPalette Digital board (1F5570A). There are designated as:

JP201	JP202
JP501	JP601

At the present time, only JP501 has any functionality associated with it. This jumper controls the Watchdog timer that prevents power on initialization errors.

Action/Solution:

JP501 should be set according to the following table. Normal usage is to enable the circuit.

	Pin 1 – 2	Pin 2 - 3
JP501	Disabled	Enabled

Distribution:

APPROVALS:

- ☒ Int'l EXP
- ☒ Int'l Subsidiaries
- ☒ Special
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EISB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	04/02/98
Product Type:	Film Recorder	Document #:	980402135536JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

Camera Interface Test Tool

Details, Diagrams

PURPOSE

This document will describe the use of tool #13705 to troubleshoot and validate the camera connector for the ProPalette product line. The switch configuration can be set to simulate all available cameras. Additionally the functionality of the film door of the 35mm camera can be tested.

FUNCTIONALITY

There is a bank of four dip switches located on the top of the tool. Switches #S1- S3 are used to select the camera back according to Table 1. Switch S4 is used to simulate the door of the 35-mm camera. As such it only has meaning when the switches S1–S3 are set to simulate a 35-mm camera.

USE

1. Apply power to the ProPalette and wait until the “Ready” message is displayed on the LCD panel.
2. Remove the 35-mm camera from the unit, the LCD panel should indicate “Out of Film” on the bottom line.
3. Set all of the switches to the OFF position.
4. Insert the tool into the camera connector with the switch bank on the top.

INDICATIONS

S1-S3 Camera Back

While there are eight possible combinations for these switches, only six combinations have meaning at this time. The remaining two are reserved for future use. The LCD panel will display the camera back type according to the following table.

S1	S2	S3	Message
0	0	0	35-mm/Out of Film
1	0	0	Pack
0	1	0	Auto
1	1	0	4 x 5
0	0	1	6 x 7
1	0	1	6 x 8

Table 1

S4 – Film Door Switch

With S1-S3 in the OFF position, changing S4 to a 1 should indicate the door open. The transition from 1 to 0 initiates the film load sequence.

S4	**Message**
1	Film Door Open
0	Loading Film - Film Load Failed - Out of Film

Table 2

AVAILABILITY

This tool, part number 13705, is available from:

Polaroid Corporation
Technical Services Department
201 Burlington Road
Bedford MA 01730

Distribution:

APPROVALS:

☒ Int'l EXP	☒ CPS Tech Services	☐ Manufacturing:
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EISB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	04/07/98
Product Type:	Film Recorder	Document #:	980407132152JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

ProPalette Revision History

Details, Diagrams

The following tables describe the revision history for the ProPalette family. The revision letter designator is the last character of the unit serial number. This character should be updated to reflect any change made to the unit.

Configuration of ProPalette 7000

Letter	Description
A	Original
B	Firmware corrected for proper spacing of picture frames on new camera backs (Jul-1-199
C	Firmware re-corrected for proper spacing of picture frames on new camera backs (Aug-28-1997)
D	Convert analog board from issue 01 to issue 02 - resistor change for sizing failures (8-16
E	4 diodes added to U18 inputs to protect U18 from yoke capactive discharge U35 negative supply disconnected from -15b, connected to -15va (Nov 13 1997)

Configuration of ProPalette 8000

Letter	Description
A	Original
B	Jumper on analog board
C	White line capacitor
D	Time out capacitor-digital board
E	Surface mount capacitor on autoluma board
F	Daughter board-CRT burn prevention
G	Diode on analog board-prevent positive voltage from going to negative side of capac

H	Watchdog on digital board
J	Version 562
K	Firmware corrected for proper spacing of picture frames on new camera backs (Jul. 8 1997)
L	Firmware re-corrected for proper spacing of picture frames on new camera backs (Au 1997)
M	4 diodes added to U18 inputs to protect U18 from yoke capactive discharge U35 Negative supply disconnected from -15b, connected to -15va (Nov. 13 1997)

These latest configurations are supported by the following circuit boards:

	rev	Analog	Digital
ProPalette 7000	E	1AE545A Is 2	1F5570A Is 1
ProPalette 8000	M	1AH823A Is 1	1F5570A Is 1

Distribution:

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TNote Document Details

Product:	**PDI - ProPalette 8000**	**Date:**	**06/17/98**
Product Type:	**FlmRec**	**Document #:**	**Knowledge*BASE 980617094542JF**
Related to:		**Posted By:**	
Public/Private:	**Public**	**Sent To:**	**KnowledgeBase@Polaroid 06/17/98 09:48:35 AM**

Image size on film

Details:

Problem Reported:

Solution:

Use the camera adjust feature built into the driver application. In RasterPlus95, the procedure is detailed on page 3-29 of the software manual that accompanies the CD-ROM for Windows. For the Macintosh software, the procedure is on page 3-14 of the manual. The date of the manual in either case is 3/97.

Approvals:

Entered by: Jordan Freedman 06/17/98
Approved by: Joseph J Oleary-III/LNOTES/POLAROID/US 06/17/98 10:00:13 AM

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RIB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	07/02/98
Product Type:	Film Recorder	Document #:	980702084310JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Image Quality	Received on:	
Film:			

Horizontal Line Artifacts

Details, Diagrams

Issue:

The ProPalette product is susceptible to horizontal line artifacts in the image. These notes are suggestions that point to the possible causes for these artifacts.

Details:

1. Check to make sure that no other electrical devices are close enough to the unit that could cause electro-magnetic interference. Monitors and electric motors are common culprits. Never stack film recorders. Never run a film recorder back-to-back with the computer's monitor or CPU.
2. Check to make sure that the surface used to hold the film recorder is vibration free. This is particularly important with the medium format and 4x5 camera backs. The 4x5 camera should never be used without bolting it to the ProPalette. Banging on the surface during exposure will cause image artifacts.
3. If the lines are fuzzy straight regularly repeating lines then check the grounds. Ensure that the computer (CPU) and the film recorder are plugged into the same power outlet and share a common ground to eliminate the possibility of a ground-loop problem.
4. Make sure the little screws that connect the parallel port connector to the chassis back plane are screwed in; make sure the cable connecting the CPU to the CFR is OK. If this is OK try a different CPU.
5. If the lines are slightly curved lines that go from edge to edge then this could be a hardware version issue. Check the serial number suffix to see if the box is an old one that e.g. may have "F" dacs in it.
6. If the lines are fuzzy relatively short lines then try a different film e.g. Ektachrome EPP or Fuji Provia. Stay away from Fuji Velvia. Velvia is especially critical i.e. it shows lines better than other films. We use it to test; customers should get better results with other films.
7. If the lines are fine black lines, straight, and extend from edge to edge then they're probably intermittency lines caused if the CRT scan light blinks on and off due to a slow (or busy) host computer. One way to check for this is to expose the image that exhibits the problem with some dummy film and once the exposure starts remove the camera from the front of the unit. Look in at the CRT

and see if the scan is blinking on and off. If so, the fix is to increase the Pacing value via the keypad. Try to use the same image and printing conditions that produced the problem.
A slow host computer may force the ProPalette to wait for data during a line scan. This will result in a regular pattern of dark lines within the image. To eliminate this problem, Pacing should be enabled on the LCD panel. This will insert a user defined wait between scan lines allowing the host computer to process the necessary image data. The amount of pacing should be increased in small steps until the data wait lines have been eliminated. An excessive pacing time will increase the total exposure time of the entire image.

Make certain that the computer that the film recorder is connected to is completely DEDICATED to imaging with the ProPalette. Every time a message comes in, or a key is pressed, or the network is polled, causes a software interrupt in the CPU. These interrupts borrow time from the process of processing the image for the film recorder. If the film recorder has to wait for image data, "data wait" lines can appear on the film.

Use firmware ver 564 or 704 and block mode drivers, which makes better use of the printer DRAM to sustain the exposure.

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**07/14/98**
Product Type:	**Film Recorder**	**Document #:**	**980714142633JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Installation**		

PCPlus Configuration

Details, Diagrams

Category: Performance

PCPlus is a MS-DOS based terminal emulation program that will allow an operator to access the ProPalette through its serial port for diagnostic purposes. The purpose of this message is to alert service providers of the proper configuration parameters for using PCPlus.

Details:

The PCPlus executable must be in the system path and the following DOS environment variable must be established when PCPlus is used for serial communication with a ProPalette.

SET PCPLUS=C:\PCPLUS

The following parameters must be established within PCPlus:

Communication Parameters (ALT-P)
- 8 data bits
- 1 stop bit
- 115200 baud rate (or other)

Setup Utility (ALT-S) non-default parameters

In PROTOCOL OPTIONS Menu

Under GENERAL OPTIONS

(A)	Protocol timing	NORMAL
(B)	Aborted downloads	KEEP
(C)	Abort xfer if CD lost	NO

Under ASCII PROTOCOL OPTIONS

(A)	Echo locally	YES
(B)	Expand blank lines	YES
(C)	Expand tabs	YES
(D)	Character spacing (millesec)	0
(E)	Line pacing (1/10 sec)	0
(F)	Pace character	0
(G)	Strip 8th bit	NO
(H)	ASCII download timeout	10 seconds
(I)	CR translation (upload)	NONE
(J)	LF translation (upload)	STRIP
(K)	CR translation (download)	NONE
(L)	LF translation (download)	NONE

pcplus.pdf

Pcplus.doc

Distribution:

APPROVALS:

EISB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	07/22/98
Product Type:	Film Recorder	Document #:	980722113223JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software, Installation		

Restoration of ProPalette Firmware

Details, Diagrams

Category: Performance

The purpose of this bulletin is to alert service providers of a method to restore corrupted firmware in a ProPalette. If the Control code has been corrupted there is no way to communicate with the unit and it is necessary to re-install the firmware. This procedure will not restore or modify the calibration data.

Product Affected:

ProPalette 7000 and ProPalette 8000

Details:

- Know location of current FLASHMAN.HEX file
- Know location of current KACNTRL.HEX file
- Terminal emulation program (ProComm Plus) must be available. See Notes Knowledge Base bulletin 980714142633JF
- Know how to disable/enable watchdog timer. See Notes Knowledge Base bulletin 980325134018JF
- Know how to enable/disable Monitor mode. See ProPalette 8000 Service Manual Section 4. Troubleshooting and Diagnostics

Procedure:

1. Disable watchdog timer
2. Enable Monitor mode
3. Connect ProPalette to computer through COMM port
4. Turn on ProPalette
5. Run terminal emulator
6. Confirm communication to ProPalete
7. Upload FLASHMAN.HEX to ProPalette
8. Run FLASHMAN.HEX
9. Remove the Control Code by entering the commands:
   R<cr>
   1<cr>
10. Note that code block (1) is gone
11. Upload the new Control Code by entering the commands:
    H<cr>
    1<cr>
    Respond to the question “Enter data name string” with:

    the_firmware<cr>

    At the prompt "Ready to receive hex file"
    Press Pg Up
    R<cr>
    Type in the fully qualified path to the CNTRL.HEX file if it isn’t in the active directory

    d:\path\xxCNTRL.HEX<cr>

xx = KA for the ProPalette 8000
xx = VT for the ProPalette 7*00*

12. After the upload is complete, wait until the flash is programmed and the Flashman menu re-appears.
13. Note that code block (1) is back
14. Shut down the ProPalette
15. Enable watchdog timer
16. Disable Monitor mode
17. Turn on the ProPalette and verify that it functions properly

Contact: Jordan Freedman via:
E-mail: Freedman,Jordan
Internet: freedmj1@polaroid.com

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PA Document Details

Product:	ProPalette 8000	Date:	08/04/98
Product Type:	Film Recorder	Document #:	980804154701JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software	Received on:	
Film:			

Expanded Highlights for ver 564

Details, Diagrams

Highlights of Version 564

· 35mm Bulk Camera Back Support
· Faster SCSI Printing via Block Mode
· High Density Deflection for smoother images
· Dither Modifications
· Film name and resolution displayed during R & G portions of exposure
· Artifact Warning Signs on LCD
· Improved ability to mix resolutions within a batch
· Error log kept in flash memory
· Hardware configurations display in LCD
· Bug fixes

35mm Bulk Camera Back Support

Initial support for the bulk camera back from Double M. The CFR will detect and display the bulk back on the LCD whenever it is mounted. To expose bulk images use the standard 35mm drivers and film tables.

Faster SCSI Printing via Block Mode

SCSI block mode is activated to cut exposure times. Requires RP95 version 1.49 or later and Mac driver 4.0.4 or later. To get the full speedup one needs a relatively recent logic board (H configuration or later i.e. logic board version 7 or later)

High Density Deflection for Smoother Images

High-density grids are enabled, and one will see an "initializing" message at startup or when cameras are swapped. Please note that the 4x5 camera can take four or five minutes to initialize.

Dither Modifications

The dither algorithm that extracts the optimum beam positioning was modified to improve flat-field pastel performance

Film name and resolution displayed during R & G portions of exposure

The current film-table name displays during the red exposure to help prevent inadvertent film table selection mistakes. Also, the actual resolution now displays during the green exposure. This shows off Polaroid's unique variable resolution capability, i.e. bitmap

images expose at their native resolution without time-consuming pixel interpolation or re-rendering.

Artifact Warning Signs on LCD
The LCD will warn if the host computer is unable to maintain the steady supply of pixel data needed for artifact-free images. The artifacts are thin dark horizontal lines, particularly noticeable in pastel regions of the image.

If this occurs customers should
- Turn on "buffer to disk" if their software driver supports it, or
- Shut down unnecessary applications competing with the driver, or
- Make sure they're not using a heavily loaded network, or
- Do any rotating, cropping, or scaling before starting the exposure, or
- Add more memory, disk, or CPU power, or
- Increase the pacing setting either via the keypad or via the driver

The warning sign appears in front of the line number during the exposure and remains there until the next image. If at any time during an exposure pixel data is not available for 200 msec an underscore "_" will display and one may get artifacts. At 400 msec it changes to a dash "-", and at 600 msec it changes to an equal sign "=" at which point artifacts are likely.

Error log kept in flash memory
Should an error occur it is recorded in flash memory. The log is accessible at Polaroid Service Centers to speed the turnaround of units sent in for repair.

Hardware configurations display in LCD
Diagnostics/Show Power-on Message now shows two screens, each lasting 10 seconds. The first is (as before) model, version numbers, date, and time; the second shows the serial number (if known) and the hardware versions: analog, digital, and video in that order. The current Pro8000 versions are 4 7 2.

Board versions
Analog
Version 0: Original PP8000 12/95 release
Version 2 (There is no version 1): Original PP8000 release with upgraded capacitors, sample and hold grounding etc. for improved flat field performance.
Version 3: Equivalent of version 2 with power fail rework for CRT protection.
Version 4: Respin including all reworks of version 2 and version 3 and 20% increase in video gain
Version 10: initial Pro7000

Digital
Version 5: original release
Version 6: initial revisions to 2 for 1 circuitry.

Version 7: final version of 2 for 1, gives fastest block mode exposures. Used in Pro7000 and Pro8000's

Video
Version 0: Prerelease video circuit where COS4 reference current relative to video current is 20% less than later designs
Version 1: Uses 2.49K offset and gain resistors
Version 2: Uses 3.01K offset and gain resistors for 20% increase in final video gain

Bug Fixes

More reliable high-speed SCSI operation. Improved accuracy of the buffer sizes reported to the host driver. Customers may need the latest host-side driver version(s) to get the full benefit. Also fixed a small memory leak that occurred whenever resolutions changed within a batch

Can no longer mix film tables between ProPalette models. A "FilmTable, bad size" error occurs if a Pro7000 table is downloaded to a Pro8000 or vice-versa.

Fixed a bug in FWLOAD.EXE that required one to have a dpalette.cfg file.

SCSI now properly reports video not smooth and luma not smooth autoluma errors.

Heap and stack memory tuned up to work with the improved throughput

Autoluma improvements
- Fixed bugs in autoluma, sped up dark current measurement, improved bottom level hunt

COS4
- Added adjustment for video version 0 hardware

Analog Diagnostics
- Fixed horizontal and vertical size tests.
- Fixed bug in horizontal test failure readout to LCD.

EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 8000**	**Date:**	**08/12/98**
Product Type:	**Film Recorder**	**Document #:**	**980812091236JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Image Quality**		

Image Tilt

Details, Diagrams

I. Subject / Situation:

Reports of tilted and otherwise misaligned images have been filtering in over the past three months for the ProPalette 8000. This issue is easiest identified by examining a strip of film that has been exposed by the ProPalette 8000, and observing every image on the strip having an identical rotation of a few degrees from zero. Severe cases show the corner of the image being clipped off on every image.

Rotated images are caused by the yoke of the CRT slipping and/or rotating during extremely severe shipping conditions of ProPalette 8000 units. This issue has been limited to the ProPalette 8000 model due to its heavy yoke assembly relative to the ProPalette 7000. There have been no reports of rotated images on the ProPalette 7000.

II. Products Affected:

ProPalette 8000 film recorder

III. Actions / Solutions:

An Engineering Change Notice (ECN) has been issued with a solution for this issue. The yoke assembly is normally held in place by a torqued metal band collar and hot melt glue. All ProPalette 7000 and 8000 units are now manufactured with an abrasive paper collar applied to the neck of the CRT before the yoke assembly is added. This self-adhesive collar provides a more effective means of preventing the yoke from rotating on the CRT neck during shipping.

This manufacturing process change is in addition to the hot melt glue and clamp that is applied to the yoke for the same purpose. Further testing will reveal whether the hot melt glue continues to be necessary.

NOTE: Due to the difficulty of installation, the small number of reports, and the re-alignment required after installation, Service is not recommending this ECN for units that are in the field. If a ProPalette 8000 is returned for service, it will be evaluated against the rotation specification. If the yoke has moved since manufacture, the abrasive collar ECN will be added to the serviced unit.

imgtilt.PDF imgtilt.doc

Distribution:

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**HR-6000 CFR, ProPalette 7000, ProPalette 8000**	**Date:**	**08/19/98**
Product Type:	**Film Recorder**	**Document #:**	**980819160722JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Maintenance**		

Cleaning CRT Faceplate

Details, Diagrams

- **Category:**

  The purpose of this bulletin is to alert service providers with alternate methods of cleaning the face of a CRT.

- **Products Affected:**

  HR6000, ProPalette 7000, ProPalette 8000

- **Details:**

  Our CRT manufacturers have been contacted on the subject of what to use to clean tape, glue, epoxy, etc., from the optically coated surface of the CRT faceplate.

  Alcohol works well for fingerprints and ordinary dirt.

  A commercial product called "Goo Gone" works well for tape glue. It's available from hardware stores, etc.

  Another commercial product called "Jasco" removes most things, including epoxy. It's available from industrial supply sources.

  DO NOT use Acetone. It can damage the coating

CRT Bulletin.PD

CRT Bulletin.do

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EISB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	08/26/98
Product Type:	Film Recorder	Document #:	980826161619JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

ProPalette Error Logging

Details, Diagrams

PERFORMANCE

This document describes the use of the host side utility ERRSTAT.EXE. Should an error occur in the film printer, it is temporarily displayed on the LCD and simultaneously recorded in flash memory. The log is accessible at Polaroid Service Centers to speed the turnaround of units sent in for repair. This capability is only available in firmware version 564 and version 704.

There are 3 classes of errors that are logged:

- Asynchronous Hardware Errors

  These are hardware errors where the film printer loses process control, the classic being filter wheel jam. There are about 35 of these, each with own unique error number. The explanation of each error code is listed in this document.

- Asynchronous Software Errors

  These are just like the hardware errors except there isn't a unique error number. A 64 character string is stored with the filename, line number, and description.

- Power On Hardware Diagnostics

  These are tests that are run at startup and generate an error message to the LED and which require an operator keystroke to proceed.

DETAIL:

We would like to know what errors have occurred and when. Since there is no internal clock in the film printer, we keep track of the total number of pictures exposed. We use the number of pictures as our notion of "time".

The host side utility will display:

1. The serial number of the unit. A separate host side utility provides this function.
2. The current version of all major circuit boards. A list of all production versions is provided.
3. The current picture count.
4. The time/date when these statistics were last reset. The command

   errstat -reset_counts

   will delete all error statistics from the flash memory of film printer
5. A histogram of all the asynchronous hardware errors and the "picture count" when the error last occurred.

   Note: that one of these errors is JUST_POWERED_ON (HE 1). When a normal reset or power on occurs, this error is generated and we know how many times the unit has been powered on.
6. A histogram of all the startup errors and the "picture count" when the error last occurred.
7. The last 10 software error messages and the "picture count" when they occurred.

8. A full autoluma history (64 samples) of the last 3 autoluma failures

SYNTAX

The proper command structure for this host side utility is:

errstat

By default, the utility will access the port COM 1 of the host computer. The help file is accessed with the command

errstat ?

ERROR MESSAGES:

ASYNC_POWERED_ON	HE(1)	Just powered on
ASYNC_PREV_EXP	HE(2)	Previously exposed film
ASYNC_MOVEWHEEL	HE(3)	Error moving filter wheel
ASYNC_NOFILM	HE(4)	Ran out of film
ASYNC_CAL_DARK_X1_NOT_REPEAT	HE(5)	
ASYNC_CAL_DARK_X1_BAD	HE(6)	
ASYNC_CAL_DARK_x10_NOT_REPEAT	HE(7)	
ASYNC_CAL_DARK_X10_BAD	HE(8)	
ASYNC_CAL_SCALE_NON_LINEAR	HE(9)	
ASYNC_CAL_NOT_STABLE_IN_TIME	HE(10)	
ASYNC_CAL_CRT_NOT_BRIGHT_ENUF	HE(11)	
ASYNC_CAL_CRT_NOT_DIM_ENUF	HE(12)	
ASYNC_CAL_CRT_BRT_NO_INCREASE	HE(13)	
ASYNC_BADVRAM	HE(14)	
ASYNC_BADVIDDATA	HE(15)	
ASYNC_GIOFAIL	HE(16)	
ASYNC_UNKNOWN_POWERON_FAILURE	HE(17)	
ASYNC_TOO_BRIGHT	HE(18)	
ASYNC_BAD_DAUGHTER_BD_ID	HE(19)	GAL code is unknown
ASYNC_FB_MEMORY_FAILURE	HE(20)	Frame Buffer mem failed
ASYNC_BAD_CAMERA_FUSE	HE(21)	Camera fuse is blown

ASYNC_BAD_CB	HE(22)	Unknown camera back
ASYNC_DOOR_OPEN	HE(23)	Film door is open
ASYNC_SHUTTER	HE(24)	Shutter failed to open
ASYNC_LOAD_FAIL	HE(25)	Film load failed
ASYNC_FILM_JAM	HE(26)	Film is jammed
ASYNC_CAL_REQFL_TOO_LARGE	HE(27)	
ASYNC_CAL_REQFL_TOO_SMALL	HE(28)	
ASYNC_CAL_INTERNAL_ERROR	HE(29)	
ASYNC_CAL_LUMA_NOT_SMOOTH	HE(30)	
ASYNC_CAL_VIDEO_NOT_SMOOTH	HE(31)	
ASYNC_CAL_RESERVED3	HE(32)	
ASYNC_CAL_RESERVED2	HE(33)	
ASYNC_CAL_RESERVED1	HE(34)	
ASYNC_LAST_HARD_ERROR	HE(35)	Must be LAST

SAMPLE REPORT

The following is a sample report generated by ERRSTAT.EXE

```
errstat, Reports accumulated film printer errors
        Version 564/704
        Compiled on Jun  9 1998

Stats read:               Tue Aug 25 08:44:12 1998

serial number = A6020H
Analog version = 4
Digital version = 7
Video version = 2

Picture Count = 0
Getting stats from film printer.... Could take 30 seconds

ERROR_HISTORY last reset: Thu Jul 09 08:38:08 1998

STARTUP_AND_ASYNC_HDW_ERRORS:
Async Hardware Error Histogram:
 Which    Count LastPicNum
 HE 1        24     0     *Unit just powered on
Startup Diagnostic Error Histogram:
 Which    Count LastPicNum
SOFTWARE_ERRORS:
There are 2 stored software errors:
       0  SWERR:expmemry.cpp,402:Offset outside of expanded_mem block
       0  SWERR:expmemry.cpp,402:Offset outside of expanded_mem block
AUTOLUMA_ERRORS:
There are 0 stored autoluma errors:
```

BOARD VERSIONS

Analog Version 0:	Original PP8000 12/95 release
Analog Version 2	Original PP8000 release reworked with upgraded capacitors, sample and hold grounding etc. for improved flat field performance.
Analog Version 3:	Equivalent of version 2 with power fail rework for CRT protection
Analog Version 4:	Respin including all reworks of version 2 and version 3 and 20% increase in video gain
Analog Version 10:	Initial Pro7000
Digital version 5:	Original release
Digital version 6:	Initial revisions to 2 for 1 circuitry.
Digital version 7:	Final version of 2 for 1, gives fastest block mode exposures. Used in Pro7000 and Pro8000's
Video version 0:	Prerelease video circuit where COS4 reference current relative to video current is 20% less than later designs.
Video version 1:	Uses 2.49K offset and gain resistors. Firmware cos4 compensation.
Video version 2:	Uses 3.01K offset and gain resistors for 20% increase in final video gain. Firmware cos4 compensation.

Errstat.exe

Errstat.doc

Errstat.PDF

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EISB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	09/02/98
Product Type:	Film Recorder	Document #:	980902140350JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

Host Side DOS Utility (SN.EXE)

Details, Diagrams

- **Category:**
  The purpose of this bulletin is to inform service providers about the new serial number feature that is part of firmware versions 564 and 704.
- **Product Affected:**
  ProPalette 7000, ProPalette 8000
- **Details:**
  This document explains the usage of the host side DOS utility (SN.EXE) to read or write a serial number into the ProPalette. The unit serial number can be used by the firmware to modify its functionality based upon the hardware configuration that is imbedded in the syntax of the serial number. During initialization of the ProPalette, the LCD display reports the unit's serial number and revision numbers of the three main circuit boards that are installed.
- **Syntax:**
  The most common usage of the utility will be to either read or write a serial number string. The command syntax to read the serial number is:

  sn<*cr*>

  An example on the output report is shown in the following section.

  The command syntax to write the serial number is:

  sn -burn=*string*<*cr*>

  where string is the unit serial number

  To display the complete help screen for the utility, enter the command:

  sn ? <*cr*>

  Where <*cr*> indicates pressing the Enter key and the default connection to the ProPalette is through COM1.
- **Example:**
  The following is an example of the output from the utility. It reports the serial number along with the major circuit board versions.

  sn, Reports and optionally sets serial number
  Version 564/704
  Compiled on Jun 12 1998

  The current film printer number is :
  serial number = A6020H
  Analog version = 4
  Digital version = 7
  Video version = 2

- **Resources**:

The DOS executeable file and copies of this bulletin in Word and Acrobat format are attached

sn.doc

sn.pdf

Sn.exe

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EISB Document Details

Product:	**ProPalette 7000**	**Date:**	**09/16/98**
Product Type:	**Film Recorder**	**Document #:**	**980916141858JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Incorrectly Marked Analog Boards

Details, Diagrams

Category: Performance

The purpose of this message is to alert service providers to a problem with the identification/marking of ProPalette 7000 analog boards.

Product Affected:

ProPalette 7000

Details:

An undetermined number of ProPalette 7000 analog boards have made it through the system with the wrong revision level marked on the board. The vendor incorrectly marked them as 1AE545A IS03, these boards are actually IS05. There has never been a released 1AE545A IS03 analog board.

Distribution:

APPROVALS:

☐ Int'l EXP	☐ CPS Tech Services	☐ Manufacturing:
☐ Int'l Subsidiaries	☐ CPS Operations	☐ Engineering:
☐ Special	☐ CPS Materials	☐ Design:

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EI Service Bulletin

Polaroid **Knowledge*Base**

EISB Document Details

Product:	**ProPalette 8000**	**Date:**	**10/02/98**
Product Type:	**Film Recorder**	**Document #:**	**981002140058JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Yoke Collar

Details, Diagrams

I. Subject / Situation:

Reports of tilted and otherwise misaligned images have been reported recently for the ProPalette 8000. This issue is easiest identified by examining a strip of film from the ProPalette 8000 and observing that every image on the strip has an identical rotation

Rotated images are caused by the yoke of the CRT slipping and/or rotating during extremely severe shipping conditions of ProPalette 8000 units. There have been no reports of rotated images on the ProPalette 7000.

II. Products Affected:

ProPalette 8000 film recorder

III. Actions / Solutions:

An Engineering Change Notice (ECN) has been issued with a solution for this problem. The yoke assembly is normally held in place by a torqued metal band collar and hot melt glue. All ProPalette 7000 and 8000 units are now manufactured with a collar of self-adhesive abrasive paper, 220 grit, applied to the neck of the CRT before the yoke assembly is added. This collar provides a more secure means of preventing the yoke from rotating on the CRT neck. The amount of clearance under the yoke collar requires that the strips are not overlapped.

The adhesive abrasive paper should be obtained locally in the Service regions. Samples will be provided by CFR manufacturing.

220_grit.PDF 220_grit.doc

Distribution:

APPROVALS:

☐ Int'l EXP	☐ CPS Tech Services	☐ Manufacturing:
☐ Int'l Subsidiaries	☐ CPS Operations	☐ Engineering:
☐ Special	☐ CPS Materials	☐ Design:

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EISB Document Details

Product:	ProPalette 7000, ProPalette 8000	Date:	10/07/98
Product Type:	Film Recorder	Document #:	981007093818JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

Monitor Mode

Details, Diagrams

Category: Performance

The purpose of this message is to alert service providers of the two alternate methods to activate Monitor mode in the ProPalette. The first is through the LCD/keypad front panel and the second is with a jumper configuration on the Digital board. Monitor mode is used to communicate with the ProPalette through its serial port.

Product Affected:

ProPalette 7000 & 8000

Details:

Method 1:

To activate from the ProPalette LCD menu, select “Diagnostics” from the top level menu and then select “GoTo Monitor Mode” from the second level menu. The LCD panel will display “Film Printer In Monitor Mode” and control of the ProPalette passes to its EEPROM. Press the Reset button on the rear of the ProPalette to restart the system and return to normal mode.

Method 2:

To activate from the digital board, the state of two startup switches J3-6 and J3-8 on the digital board must be set. If both of those points are tied to ground, the unit will power-up in the “Monitor” mode. All of the pins along the bottom of J3 are at ground potential. The LCD panel does not work when you enter “monitor mode” in this manner and there is no indication that you have been successful. Load up a terminal emulator to the serial port to verify that the EEPROM has control. Remove the jumpers and restart the system to return to normal mode.

This method must be used when the firmware has become corrupt and there is only a blinking cursor on the LCD display.

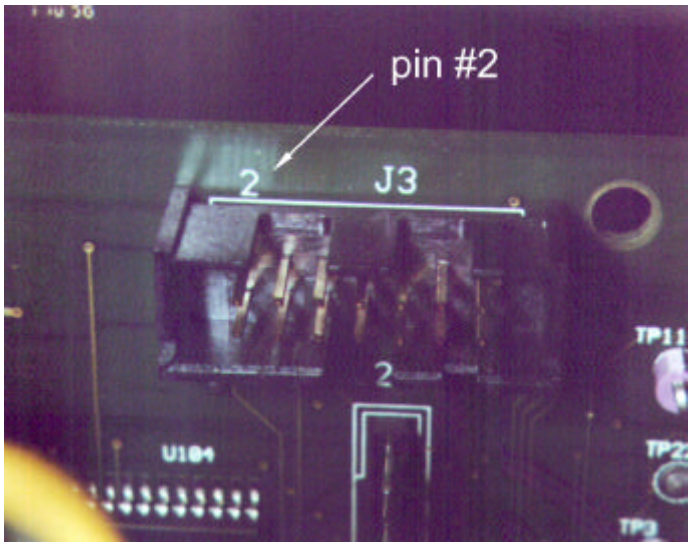

Figure 1
Digital Board - J3 header

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Product:	**ProPalette 7000**	**Date:**	**10/20/98**
Product Type:	**Film Recorder**	**Document #:**	**981020134924JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

Firmware 705 Upgrade

Category: Performance
The purpose of this message is to alert service providers of a solution to a problem that ProPalette 7000 customers may experience when upgrading from firmware version 704 to version 705.

Product Affected:
ProPalette 7000

Details:
Connect a ProPalette 7000 to a Mac daisy chained first, second or third device "does not matter." Turn the ProPalette 7000 "ON" and then reboot the MAC. Use Cfrupdate to download version 705 VTCNTRL.HEX over version 704 dated 8/21. Cfrupdate host displays Unknown Error and the status of ProPalette 7000 LED is memory error 591

Resolution:
Connect a ProPalette 7000 to a Mac daisy chained first, second or third device "does not matter." Turn the ProPalette 7000 "ON" and then reboot the MAC. After the MAC has been rebooted, reset the ProPalette 7000 by pressing the reset button in back of the ProPalette 7000 film recorder. Use Cfrupdate to download version 705 VTCNTRL.HEX control code. The user should receive no problems.

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Polaroid Knowledge*Base

Product:	ProPalette 7000, ProPalette 8000	Date:	10/29/98
Product Type:	Film Recorder	Document #:	981029132131JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

Serial Number Error Check

Category: Performance

The purpose of this message is to alert service providers of a solution to a problem that ProPalette service technicians may experience. With firmware version 564/704 or higher, the ProPalette has the capability to store its serial number in flash memory. There is a validity test, an invalid serial number will generate the following error message:

OSWERR:FPSRLNUM.CPP,134:SERIAL NR CRT/MODEL CONFLICT

Product Affected:
ProPalette 7000 and ProPalette 8000

Details:
The unit firmware and alignment station software use this embedded serial number to set internal parameters for the proper adjustment of the equipment. That software error is there to catch invalid information in the eighth character of the serial number, and it doesn't respond graciously to Pre-Production (PPC) or Manufacturing Pilot (MP) units. It monitors the eighth position of the serial number for a valid character.

The model type is specified by the character in the first position of the serial number. ProPalette 7000's **must** have a blank eighth character in the serial number. ProPalette 8000's can only have a blank, "T", or "W" as the eighth character; otherwise, you'll get the software error. Blank denotes an AEG CRT (clear gun); "T" signifies a first generation Thomas CRT (black gun- our current production); "W" indicates the future second generation Thomas CRT (white gun). The color refers to the glass seal of the CRT observed through the neck connector. If the firmware finds a "T", it changes the color balance & cos4 parameters to compensate for first generation Thomas CRTs.

Resolution:
When entering a serial number for pre-production or manufacturing pilot units, replace the PPC or MP with "8", leave the month "K" (second character) and the year "5" (third character) so there will be no confusion to when the unit was originally manufactured. In addition, it will prevent the chance of having two units with the same serial number.

APPROVALS:

EI Service Bulletin Polaroid Knowledge*Base

Product:	ProPalette 7000, ProPalette 8000	Date:	11/02/98
Product Type:	Film Recorder	Document #:	981102112810JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

Restoration of ProPalette Firmware using Alignment Station

Category: Performance
The purpose of this bulletin is to alert service providers of a method to restore corrupted firmware in a ProPalette using the "Upgrade Firmware" functionality of the Alignment station. If the Control code has been corrupted, the Alignment station cannot communicate with the unit and the operator will not be able to restore the Control code using the "Upgrade Firmware" option. This procedure will circumvent this problem.

Product Affected:
ProPalette 7000 and ProPalette 8000

Prerequisite:
Watchdog Timer
Jumper JP501 controls the Watchdog timer that prevents power on initialization errors. JP501 should be set according to the following table. Normal usage is to enable the circuit.

	Pin 1 – 2	Pin 2 - 3
JP501	Disabled	Enabled

Monitor Mode
To activate Monitor Mode from the digital board, the state of two startup switches J3-6 and J3-8 on the digital board must be set. If both of those points are tied to ground, the unit will power-up in the "Monitor" mode. All of the pins along the bottom of J3 are at ground potential. The LCD panel does not work when you enter "monitor mode" in this manner and there is no indication that you have been successful.

Remove the jumpers and restart the system to return to normal mode

Procedure:
1. Connect ProPalette to the Alignment station in the normal fashion.
2. Disable watchdog timer. (see above)
3. Enable Monitor mode. (see above)
4. Turn on ProPalette.
5. Setup the Alignment station for the correct product.
6. Use the "F1" option to upgrade the firmware.
7. Shut down the ProPalette.
8. Enable watchdog timer. (see above)
9. Disable Monitor mode. (see above)

10. Turn on the ProPalette and verify that it initializes properly.
11. Continue with the Alignment station procedures.

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Product:	**ProPalette 8000**	**Date:**	**11/24/98**
Product Type:	**Film Recorder**	**Document #:**	**981124102322JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

CRT/Serial Number Verification

Product Affected:

ProPalette 8000

Category:
With the introduction of firmware version 564, the ProPalette now has the capability to store the serial number of the unit in flash memory. This functionality is required so that the installed firmware can adjust the exposure parameters appropriately for the different CRT's that are available for the ProPalette 8000

Details:
ProPalette 8000's have been manufactured with two types of CRT's, the original AEG and the current Thomas tubes. Future improvements in the CRT are currently planned. The eighth character in the serial number defines what type of CRT is installed, it can only be a blank, "T", or "W" in the serial number, otherwise a software error will be reported on the LCD panel. Blank means AEG CRT (clear gun - initial production); "T" indicates a first generation Thomas CRT (black gun - our current production); "W" means the future 2nd generation CRT (white gun - future production). The firmware will change the color balance & cos4 parameters to compensate for the installed CRT based upon the serial number. This topic was initially discussed in the Lotus Notes Knowledge Base article 981029132131JF.

Resolution:
The color mentioned in the preceding paragraph refers to the glass seal of the CRT observed through the neck connector. It is necessary for the Service technician to verify the type of CRT by observing the color of the glass seal at the neck of the CRT before they enter the serial number into flash memory. The outer shell of the chassis must be removed, but no further disassembly is required, to conduct this inspection

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Polaroid **Knowledge*Base**

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**11/30/98**
Product Type:	**Film Recorder**	**Document #:**	**981130095843JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Modified Testing Sequence

Category: Performance
The purpose of this message is to alert regional service providers of a change to the recommended testing sequence for all ProPalette's.

Product Affected:
ProPalette 7000 and ProPalette 8000

Details:
There have been instances reported where a burn may have occurred on a ProPalette CRT during Service due to either a hardware fault or corrupted firmware.

Resolution:
To reduce the possibility of this happening it is suggested that before a unit is powered up for service, the socket at the base of the CRT is unplugged from the CRT. The initial digital and analog tests should be performed on the unit before that connector is reinstalled on the neck of the CRT. This will preclude the generation of any beam current before we can ensure that the unit is functioning.

The connector on the back of the CRT should be removed if any circuit board is replaced or firmware installed. After the initial functional tests are performed, and the unit has passed all its internal diagnostics, AC power should be shut down on the ProPalette, the CRT connector re-installed and the unit powered up again. At this time it is safe to proceed with any tests that will put light on the tube.

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Polaroid **Knowledge*Base**

Product:	HR-6000 CFR	Date:	12/08/98
Product Type:	Film Recorder	Document #:	981208164648JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

Video Monitor Board Final Assembly

Category:

The purpose of this message is to alert service providers of a change to the part number for the Video Monitor Board Final Assembly.

Product Affected:

HR6000

Details:

The HR6000 Video Monitor Assembly 1E4391A is now incorporated into the Monitor Board Final Assembly 1AH901A. This will ensure that the anode clips and caps are installed on the board.

Please use the 1AH901A part number when you next order the HR6000 monitor boards.

Old part number:	1E4391A
New part number:	1AH901A

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Polaroid Knowledge*Base

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**12/21/98**
Product Type:	**Film Recorder**	**Document #:**	**981221100843JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

Firmware Corruption

Category:
The purpose of this message is to alert service providers of the chance to corrupt the alignment parameters during a firmware upgrade when using the Alignment station equipment.

Product Affected:
ProPalette 7000 & 8000

Details:
The Alignment station has the functionality to upgrade the firmware of a UUT. The utility has been designed with a specific work process flow intended. If the Alignment station is used to upgrade the firmware of a working ProPalette, all of the alignment and calibration parameters in the unit will be lost.

The work process assumes that an alignment will be performed on the UUT and any high-density parameters must be erased before the Alignment station will work correctly. High-density parameters were implemented with firmware versions 564 for the ProPalette 8000 and 702 for the ProPalette 7000.

Resolution:
The correct procedure to change the firmware of a *working* ProPalette is to use the provided capability when the upgrade, either EXE or HQX, is downloaded from the Polaroid web site.

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Polaroid **Knowledge*Base**

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**01/11/99**
Product Type:	**Film Recorder**	**Document #:**	**990111163912JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

OSSTRTUP Error Message

Details:

There have a number of non-fatal error messages reported from the field. The displayed error message will typically read:

SWERR OSSTRTUP.CPP:155 (2 UI)

These are caused by a static charge generated by the Mylar film substrate when the film is pulled out of the film canister to load into the mounted 35mm camera. The discharge path into the ProPalette is through the DX encoding pins that contact the film canister. This is aggravated by the extremely dry seasonal weather.

Resolution:

Two workarounds will help to eliminate this problem:

Reset the ProPalette with the switch on the rear chassis. This will clear the non-fatal error and allow proper operation.
Pull out 1 - 2 inches of film from the film canister before installing it into the mounted 35mm camera. This will allow the built-up charge to be dissipated before the DX pins are engaged.

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Polaroid **Knowledge*Base**

Product:	**ProPalette 7000**	**Date:**	**01/12/99**
Product Type:	**Film Recorder**	**Document #:**	**990112141226JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Analog Board Change

Category:

The purpose of this message is to alert service providers of a phase-in change to the Analog circuit board for the ProPalette 7000. Units using this board or its re-worked equivalent will be defined as a "K" revision.

Details:
An Engineering Change Notice #IS11776 has been released that documents a change to the Analog circuit board for the ProPalette 7000. The complete matrix of change is defined in the following documents:

Part Number	Description	Old Rev	New Rev	Date
1AE543A	Analog PCB Schematic	05	06	12/01/98
1AE544A	Analog PCB Fabrication	03	04	12/01/98
1AE545A	Analog PCB Assembly	05	06	12/01/98

The change reflects the addition of capacitor C801 (22 F @ 35V) and two diodes D801 and D802 (1N4004). These components are configured to add additional protection against CRT burns.

Deviation Notice 18554 details the necessary modifications to rework a 1AE545A Is05 board to the Is06 level.

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Polaroid **Knowledge*Base**

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**01/18/99**
Product Type:	**Film Recorder**	**Document #:**	**990118092644JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Installation**		

Errors on LPT

Category:
The purpose of this message is to alert service providers of a solution to a problem that ProPalette customers may experience when printing to the LPT port.

Details:
Corruption of data while printing to the LPT port can result in either of the following error messages in a small number of cases:

> "First character of Command not ESCAPE"
> "Start Exposure Issued without prior Term. Exp"

Resolution:
To enhance the speed of operation, the RIP software will typically write directly to the LPT port. The data is corrupted because the Plug and Play (PnP) function in the PC BIOS can poll the LPT port at the same time resulting in data corruption.

The PnP polling for the port must be disabled in the system BIOS by setting the port to ECP. This allows the operating system and application software to directly control the port with no interference from the BIOS.

If this fails to resolve the problem, the user must switch to printing via the SCSI port.

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Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**01/19/99**
Product Type:	**Film Recorder**	**Document #:**	**990119153416JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

ProPalette Front Bezel

Category:

The purpose of this message is to alert service providers of a clarification to the ProPalette Parts Catalog (Stocked Parts Only).

Details:

Plate #5 details the component parts that make up the Front Bezel and Keyboard assembly for the ProPalette product line. Information is lacking regarding the top-level assembly number for the assembled Front Bezel

Resolution:

The top-level assembly number for the assembled ProPalette Front Bezel is:

	ProPalette 7000	ProPalette 8000
Assembly Number	1F5486A	1F2534A

These assemblies contain all of the components detailed in plate #5 of the ProPalette Parts Catalog (Stocked Parts Only).

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Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**01/20/99**
Product Type:	**Film Recorder**	**Document #:**	**990120133548JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Camera and Adapter Sub-Assembly

Category:

The purpose of this message is to alert service providers of a clarification to the ProPalette Parts Catalog (Stocked Parts Only).

Product Affected:

ProPalette 7000 & 8000

Details:

Plate #6 of the ProPalette Parts Catalog details the component parts that make up the Camera and Adapter assembly for the ProPalette product line. Information is lacking regarding the top-level assembly number.

Resolution:

The top-level assembly number for the assembled ProPalette Camera and Adapter is:

	ProPalette 7000	ProPalette 8000
Assembly Number	1F2537A	1F2537A

These assemblies contain all of the components detailed in plate #6 of the ProPalette Parts Catalog (Stocked Parts Only).

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EI Service Bulletin Polaroid Knowledge*Base

Product:	ProPalette 7000, ProPalette 8000	Date:	01/22/99
Product Type:	Film Recorder	Document #:	990122100026JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

Camera Interface Error Messages

There are several errors that occur when a 35 mm camera is installed on a ProPalette which result because of defective U501 & U505 IC's on the ProPalette digital board (1F5570A). They are:

"Film door is open" error
"Select 6x7 camera back" error

The error message may remain even when the camera is removed. Additionally the film may not load properly.

We are proposing a change to the BOM for the ProPalette digital board that would replace the CMOS chips used at U501 and U505 with LS chips.

The impact of this change would be to reduce the number of failures and returns from ESD that occurs at the camera interface connector.

The changes are:

	old	new
U501	74HC244	DM74ALS244AWM-ND
U505	74HCT257	DM74ALS257M-ND

The new part numbers reflect the ordering information from the supplier Digi-Key.

Replacing the chips should resolve the problem defined above. Verify image quality before performing a geometery realignment on the unit.

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Product:	**ProPalette 8000**	**Date:**	**02/05/99**
Product Type:	**Film Recorder**	**Document #:**	**990205102212JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

1AH823A Analog Board Modifications

Performance

The purpose of this bulletin is to provide service providers with a board modification process to upgrade the 1AH823A Analog board.

Product Affected:

1AH823A Analog board for the ProPalette 8000

Details:

These procedures will upgrade the functionality of the 1AH823A Is01 or Is01B Analog board for the ProPalette 8000 to match the functionality of the 1AH823A Is01C in two steps.

Process:

Step 1 - 1AH823A Is01 to 1AH823A Is01B

U18 Protection

This modification is required to protect U18 on the Analog board from high voltage discharge from the CRT yoke. Ensure that the added components have very short leads and are mounted as close as possible to the pins of the U6 and U31.

1. Connect a diode (1N4148) between pin 2 and 4 of U6 (cathode to pin 2)
2. Connect a diode (1N4148) between pin 2 and 7 of U6 (cathode to pin 7)
3. Connect a diode (1N4148) between pin 2 and 4 of U31 (cathode to pin 2)
4. Connect a diode (1N4148) between pin 2 and 7 of U31 (cathode to pin 7)

image (**U18 FIX.JPG**)

U35 Protection

This modification is required to comply with U35 design limitations on the analog board.

1. Cut the trace that connects TP47 to the junction of U35-4 and DC35A(-)
2. Cut the trace that connects DC35A(+) to CR12 (anode)
3. Add jumper from R54 (right side) to CR12 (anode)
4. Add jumper from CR15 (bottom right) to U35-4

image (**1AH823A U35.TIF**)

Digital/Analog Converter

U2 and U34 must be populated with a DAC16-007; this is recognized by a white dot in the pin #1 identifier position.

Step 2 - 1AH823A Is01B to 1AH823A Is01C

This final step is required to further protect the CRT from possible burns. It defines the changes outlined in the manufacturing deviation notice Dev. No. 18555

Connect two 1N4004 diodes in series between the bottom end of R45 (anode) and U4-12 (cathode).
Connect the negative side of a 22 mf/35 Vdc capacitor to the junction of the two diodes defined in the previous step.
Connect the positive side of the 22 mf/35 Vdc capacitor to the left-hand lead of C31.
The components should be fastened to the board with a non-conductive adhesive. Ensure that no leads lay across any conductors or components.

image (**CRT FIX.TIF**)

U18 FIX.JPG 1AH823A U35.tif CRT FIX.tif

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Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**02/08/99**
Product Type:	**Film Recorder**	**Document #:**	**990208105356JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

Mac G3 Firmware

Subject:

Polaroid has released firmware versions 707 and 567 for ProPalette 7000 and 8000 film recorders. This new firmware version is required for those ProPalettes that will be connect to a Apple Power Macintosh G3 series computer that has recently become available. SCSI card adapters intended for the Mac G3s operate on the PCI bus at address 1, rather than the standard address 0. This change has made it necessary to update the ProPalette firmware.

Please notify your Palette resellers and customers about this important new firmware upgrade for the ProPalette 7000 and 8000 now available on Polaroid's FTP site.

Products Affected:

ProPalette 7000 film recorders require firmware version 707 to operate properly with the Apple Power Macintosh G3, contained in file PRO7V707.EXE (Win) and PRO7V707.HQX (Mac).

ProPalette 8000 film recorders require firmware version 567 to operate properly with the Apple Power Macintosh G3, contained in file PRO8V567.EXE (Win) and PRO8V567.HQX (Mac).

Actions / Solutions:

From the following directory on Polaroid's FTP site, download the appropriate file for the ProPalette film recorder to be updated. These files contain a utility for installing the firmware, the new firmware hex code, and a README.TXT file with instructions and details about this version of the firmware.

ftp://ftp.polaroid.com/pub/imaging/output/cfrecord/AllModels/Pro8000/ ... or /Pro7000/

NOTE: Contained inside the archives is a file named README.TXT. This file contains instructions for installing the new firmware. Please follow these instructions carefully. For best performance with the Apple Power Macintosh G3, all ProPalette film recorders should have their firmware upgraded to these new versions at this time.

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Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**02/08/99**
Product Type:	**Film Recorder**	**Document #:**	**990208111248JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

Mac G3 SCSI Software Issues

Situation:

Apple Computer, Inc. has recently introduced a new line of computers called the Power Macintosh G3. For connectivity, the new G3s include FireWire and Universal Serial Bus (USB) ports only. SCSI has been excluded. The absence of SCSI presents a problem for connecting Palette film recorders, which utilize SCSI, to Macintosh computers.

Apple will soon provide a SCSI adapter card for connecting SCSI devices (like the Palette) to the Power Macintosh G3. This is similar to the way that SCSI is handled on Windows computers, with one important exception: the SCSI card for the G3 is set to occupy PCI bus Address 1 rather than 0. All Palette software for Macintosh was written to assume Address 0. As a result, none of the Macintosh software currently available for Palette film recorders will work on a Power Macintosh G3.

Products Affected:

All Palette film recorders with SCSI interface (excludes the CI-3000).
All Macintosh software, including CFRUpdate, the firmware update utility.

Actions / Solutions:

There are four major initiatives currently underway to provide a solution to this platform incompatibility issue:

1. Palette for Macintosh has been revised and is currently being tested with the Power Macintosh G3. A software patch will be made available on Polaroid's FTP site.
2. ProPalette 7000 and 8000 firmware has just been released and is currently available on Polaroid's FTP site.
3. RasterPlus for Macintosh is being modified by Graphx and is currently being tested in Polaroid's SQE laboratory. This software is still on schedule for a March 8 release.
4. Palette Export and CFRUpdate will be revised and posted on Polaroid's FTP as available.

NOTE: This problem is not unique to Polaroid film recorders. Most SCSI devices from other manufacturers will experience similar problems with the Power Macintosh G3 computers.

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Product:	ProPalette 7000, ProPalette 8000	Date:	02/24/99
Product Type:	Film Recorder	Document #:	990224131408JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

Digital Board (1F5570A) Revisions

Category: Performance
The purpose of this message is to alert service providers of the revision change history to 1F5570A Digital board.

Product Affected:
ProPalette 7000, ProPalette 8000

Details:
The ProPalette Digital board (1F5570A) has undergone six revisions since it was initially released. This document will define the changes for each revision and detail which parts should be changed to improve the reliability of the board.

History:
Each subsequent higher Issue Number (IS*ii*) incorporates the previous revision changes.

IS01 - Baseline release.
IS02 & IS03 - Change of approved supplier and part number for U519.
IS04 - Change the value of R334, in the Watchdog timer, from 4.7 Kohm to 3.0 Kohm.
IS05 - Change the standoff voltage rating of C802 and C804 from 20 Vdc to 35 Vdc. Change of approved supplier and part number for U306.
IS05B - Change U501 and U505 from CMOS to LS devices. Change of approved supplier and part number for U203 & U204.
IS06 - Re-spin to add functionality to support the ProPalette 80xx design

Required Changes
The following parts should be changed to bring a functioning board up to the latest revision level:

Part	Description	Supplier/Part Number
R334	3.0 Kohm	ROHM/MCR18JW302 AVX/CR32302JT KOA/*RM73B2BTE302J
C802	22 F – 35Vdc	SPRAGUE/293D226X0035E2T
C804	22 F – 35Vdc	SPRAGUE/293D226X0035E2T
U501	74LS244	DigiKey/DM74ALS244AWM-ND
U505	74LS257	DigiKey/DM74ALS257M-ND

These defined changes will bring a 1F5570A board up to IS05B. No support will be provided bring the revision level any higher.

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Polaroid Knowledge*Base

Product:	**ProPalette 7000**	**Date:**	**03/05/99**
Product Type:	**Film Recorder**	**Document #:**	**990305111710JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Analog Board (1AE545A) Revisions

- **Category: Performance**

The purpose of this bulletin is to furnish service providers with a board modification process to upgrade the 1AE545A Analog board.

- **Product Affected:**

1AE545A Analog board for the ProPalette 7000

- **Details:**

These procedures will upgrade the functionality of the 1AE545A Is01 Analog board for the ProPalette 7000 to match the functionality of the 1AE545A Is05B/Is06 in two steps.

Process:

Step 1 - 1AE545A Is01 to 1AE545A Is02/Is05

U18 Protection

This modification is required to protect U18 on the Analog board from high voltage discharge from the CRT yoke. Ensure that the added components have very short leads and are mounted as close as possible to the pins of the U6 and U31.

1. Connect a diode (1N4148) between pin 2 and 4 of U6 (cathode to pin 2)
2. Connect a diode (1N4148) between pin 2 and 7 of U6 (cathode to pin 7)
3. Connect a diode (1N4148) between pin 2 and 4 of U31 (cathode to pin 2)
4. Connect a diode (1N4148) between pin 2 and 7 of U31 (cathode to pin 7)

U18 FIX.JPG

U35 Protection

This modification is required to comply with U35 design limitations on the analog board.

1. Cut the trace between the two feed-through (topside) coming off of Q7-C
2. Cut the trace (bottom side) between CR12-anode and the trace between DC35A and DC35B
3. Connect a jumper wire (bottom side) from DC35B left side to R123 right side (-15VA)
4. Connect a jumper wire (bottom side) from CR12-anode to R125 right side (-15VB)

1AE545A bot.jpg

1AE545A top.jpg

Digital/Analog Converter

U34 must be populated with a DAC16-007; this is recognized by a white dot in the pin #1 identifier position.

Step 2 - 1AE545A Is02/Is05 to 1AE545A Is05B/Is06

This final step is required to further protect the CRT from possible burns. It defines the changes outlined in the manufacturing deviation notice Dev. No. 18555

1. Connect two 1N4004 diodes in series between the bottom end of R45 (anode) and U4-12 (cathode).
2. Connect the negative side of a 22 mf/35 Vdc capacitor to the junction of the two diodes defined in the previous step.
3. Connect the positive side of the 22 mf/35 Vdc capacitor to the left-hand lead of C31.
4. The components should be fastened to the board with a non-conductive adhesive. Ensure that no leads lay across any conductors or components.

CRT FIX.jpg

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EI Service Bulletin Polaroid Knowledge*Base

Product:	ProPalette 7000, ProPalette 8000	Date:	03/23/99
Product Type:	Film Recorder	Document #:	990323103749JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

SWERR ferrhist.cpp Error Message

Category: Performance
The purpose of this message is to alert service providers to a problem that ProPalette customers may experience.

Product Affected:
ProPalette 8000 & 7000

Details:
The ProPalette will display an error message in the LCD panel. The system passes the initial power-on diagnostic test but will not go into the "READY" state. It stops and with the error of "SWERR:ferrhist.cpp,189:Error burning ERR"

After the initial diagnostics finish, the "just powered on" message is generated as an error and written into flash memory as it is supposed to do. If the error history in flash has somehow become corrupted it will set an error and attempt to restart and you're in a circular loop.

This problem is resolved in firmware version 565/705 and later. Three attempts are made to write to flash, then vFlash 1 is erased and then tried once more.

Resolution:
The firmware should be upgraded to version 565/705 or later. This can be performed at a Service Center or by using the procedure outlined in the Lotus Notes Knowledge Base article 980722113223JF.

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EI Service Bulletin Polaroid Knowledge*Base

Product:	ProPalette 7000, ProPalette 8000, R-6000	Date:	03/24/99
Product Type:	Film Recorder	Document #:	990324130140JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

Modification to Ricoh Camera

Category: Performance
The purpose of this message is to alert service providers of a solution to the ESD problem that ProPalette and HR6000 customers may experience.

Product Affected:
ProPalette 7000, ProPalette 8000, R6000

Details:
This bulletin summarizes the actions to minimize the occurrence of "Camera not recognized" or "6 x 7 Camera Selected" errors seen on ProPalette's. The problem comes from an electrostatic discharge to the "DX pins" inside the 35mm Ricoh camera back which destroys the interface chips. The firmware displays some other camera back on the LCD and prevents normal 35mm exposures. There has been no indication of this failure for the R6000 but it uses the identical camera body.

The hardware solution is to cut the wires in the Ricoh camera back that connect the DX pins to the camera edge connector. This has no effect on the functionality of the unit.

An upcoming firmware solution (568) will be to add a new option to the LCD menu: "Lock Camera Back". The default is "AutoSense", alternatives are 35mm and Bulk 35mm for both models with 4 x 5, 6 x 7 and 6 x 8 also available on ProPalette 8000. If the customer starts seeing the wrong camera in the LCD they can lock in the right camera back and continue imaging.

Resolution:
1. With camera lens facing away from you of the circuit board and remove them. Use care not to damage adjacent wires.
2. Replace top cover.
3. Identify the modification by placing a small white dot next to the DX code pins inside the film chamber.
4. Update the configuration code for the ProPalette

	Old Revision	New Revision
ProPalette 7000	K	L
ProPalette 8000	P	R

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Product:	ProPalette 8000	Date:	03/25/99
Product Type:	Film Recorder	Document #:	990325130433JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

Hi Voltage Cable Assembly (P/N 1F5479A)

Category: Performance
The purpose of this message is to alert service providers to a problem that has become apparent with the replacement Hi Voltage cable assembly (P/N 1F5479A).

Product Affected:
ProPalette 8000

Details:
All replacement cable assemblies are wired with the –150 Vdc lines reversed on the J34 connector that plugs into the analog board. This is recognized by observing the green/black twisted pair wires on the connector. The correct orientation is to have the green wire on the outside pin. As supplied, the black wire is on the outside pin. **<see MONSTER.JPG>**

Resolution:
The resolution is to re-wire the connector properly in either one of two acceptable methods.

Snap the cap off the connector. Remove the wires and re-install properly. Ensure that the wire insulation is pierced properly when the wire is inserted into the connector. Replace the connector cap.

or

Cut the wires approximately 1" back from the connector body. Place heat shrink tubing on the cut wires and move it back along the wire so that it is out of the way. Strip back sufficient insulation on all four wires to ensure a good connection. Cross-connect and splice the wires with solder. Move the heat shrink tubing up over the splice and heat the tubing to protect the connection.

monster.jpg

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Product:	ProPalette 7000, ProPalette 8000	Date:	04/05/99
Product Type:	Film Recorder	Document #:	990405153958JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Image Quality		

ProPalette Color Quality

Category

The purpose of this message is to alert service providers of a non-subjective method to evaluate the color balance of a ProPalette.

Details:

Color balance will be evaluated by measuring the color densities with a transmittive densitometer and evaluating the measured readings. The standard image file GRAYCARD.TIF will be exposed on Kodak EliteChrome film to the ProPalette with an imaging application. The file is placed in the film tables directory when the imaging application is installed. This image should provide densities between 1.5 and 0.7 density units.

Independent of the ProPalette, the film itself and its processing must obviously meet this specification. This can be checked by producing an optical image by a daylight exposure of a MacBeth chart or an 18% gray card with a 35mm camera; or by xenon strobe and a neutral density step wedge. This baseline image should also have a density between 1.5 and 0.7 density units.

Evaluation:

The absolute difference between the color densities must be less than or equal to 0.06 density units.

Absolute value of	max Delta density
$R_{density} - G_{density}$	0.06
$R_{density} - B_{density}$	0.06
$B_{density} - G_{density}$	0.06

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Product:	**ProPalette 7000**	**Date:**	**04/13/99**
Product Type:	**Film Recorder**	**Document #:**	**990413133530JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Image Quality**		

Green Color Cast

Category: Performance
The purpose of this message is to alert service providers of a problem that customers may experience with an overall green color cast to their images. This will be apparent when an image is exposed onto Kodak Elite II film.

Product Affected:
ProPalette 7000

Details:
The color transmission characteristics of the green filter, used in the ProPalette 7000, have changed since December 1998 due to process variations in the manufacturing of the filters. The color properties for which the film table was designed have changed appreciably.

Since the manufacturing inventory contained a mix of old and new filters, the color cast problem is not apparent in all units. The difficulty was not apparent in Manufacturing during final image inspection because evaluation was done on Presentation Chrome film, which has different color renditions and does not exhibit this problem to such a great extent.

Resolution:
To determine if the unit has a problem, expose the GRAYCARD.TIF image to Elite II film and evaluate the flat field for color purity.

A new firmware version is under development that will correct this problem but it is not available presently. This firmware will interrogate the unit serial number to determine its configuration and determine if a correction must be made to the color balance. A utility to alter the unit serial number will be made available.

In the interim, any units that exhibit this problem should be placed on hold until the firmware fix and correct procedures are available. There are no "old" green filters available for replacement.

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Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**05/10/99**
Product Type:	**Film Recorder**	**Document #:**	**990510130756JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

Reported SWERR Error Messages

This Knowledge Base note will list the common SWERR error messages as they are reported from the field. An attempt will be made to explain the error, why it occurs, how to resolve it and possible planned improvements in the product to eliminate them.

SWERR:ferrhist.cpp,189:Error burning ERR
SWERR:osstratup.cpp, 162:2 UI
SWERR:rico.cpp, 486: perf hi as expc
SWERR:dp2layer.cpp, 215: Unknown analog b

SWERR:ferrhist.cpp,189:Error burning ERR
This is a result of the corruption of the portion of flash memory that holds the error log. The fix was to remove the error log using FLASHMAN and let the unit re-initialize the log. The easiest way for the log to become corrupt is to shut off the unit while the log is being written. I don't know if this was the case for you but it can happen that way. Suffice it to say that a corrupt error log will cause the error message. A planned upgrade to the firmware will resolve this problem from happening.

SWERR:osstratup.cpp, 162:2 UI
This error occurs when the microprocessor in the ProPalette is starting up and it receives an unexpected interrupt (2 UI). Resetting the unit with the switch on the back will clear the error. There are many reasons that the unexpected interrupt can occur and they all revolve around electrical noise. It could be a discharge from the CRT, noise on the low voltage power supply or even an external static discharge from someone touching the outside shell.

SWERR:rico.cpp 486 perf hi as expc
This error occurs when the film perforation after film transport is not what the firmware expects to see. There are two models of Ricoh camera's in use and the firmware determines which model is installed by measuring the signal from the perforation sensor. If the sensor doesn't see what it expects after initialization, then an error is reported. This could be a camera film advance problem.

SWERR:dp2layer.cpp, 215: Unknown analog b
Immediately after replacing the Analog board in a ProPalette, the indicated error message may appear after the firmware version is displayed in the LCD display during the power-up sequence self test. A unit may give this error message if the analog board is changed without upgrading the firmware on the Digital board. All board upgrades are hardware backwards compatible with the proper firmware

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Product:	ProPalette 7000, ProPalette 8000	Date:	05/20/99
Product Type:	Film Recorder	Document #:	990520094526JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Image Quality		

Color Adjustment

Category:
The purpose of this message is to alert service providers of a method to make adjustments to a particular film tables color characteristic curve for each RGB channel.

Product Affected:
ProPalette 7000, ProPalette 8000

Details:
The need for adjusting our film tables has been apparent for some time. This would allow an operator the capability to tailor the output of a film recorder to their expectations. The "advanced" options in Raster Plus can only provide a control to lighten or darken each color.

Resolution:
Adobe Photoshop has several ways to make fine adjustments to color. We recommend using this program to adjust the gamma within the color in question. The following procedure assumes that the initial results obtained with image/film table combination are close, just not perfect.

In Photoshop, open the image in the RGB mode
Select Image, Adjust, and Levels
In the Channel drop-down menu, select the color to be adjusted (i.e., if red is too weak, select the Red channel)
Move the center (gamma) slider ONLY to the left (to increase Red) or to the right (to decrease Red). Make changes of no more than 0.05 gamma units. Example: 1.05 will increase Red significantly, 0.95 will decrease Red significantly.
Repeat for other color channels, if necessary. This step is optional. We recommend adjusting only one color channel at a time between exposures.
Expose the image and examine, using the Export plug-in is the fastest method.
Examine, evaluate and repeat the process if necessary.

After a few iterations to get this right, the new gamma settings can be saved and used for every image that comes from the same source and uses the same film table. Since the final color balance is dependent on several factors, the entire procedure would need to be repeated for other image sources and other film tables.

Note that by adjusting gamma, as opposed to just the brightness and contrast, the image data in the extremes, deep shadows and bright highlights are preserved and "clipping" of the image is prevented.

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Product:	ProPalette 7000, ProPalette 8000	Date:	05/24/99
Product Type:	Film Recorder	Document #:	990524104404JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

Description of the FLASHMAN utility

Category:

The purpose of this bulletin is to inform service providers of the structure and use of the FLASHMAN.HEX host side utility for the ProPalette products. The Flash devices in the ProPalette are programmable, non-volatile memories that are used, primarily, to store the control code and calibration data for the ProPalette. Other programs and data can be placed in the system such as diagnostics and control information. The flash contains data blocks of various sizes. There is no fixed order of data blocks in flash. They are programmed into flash as they are received. Data blocks cannot be duplicated; there's only one copy of a given data type in flash at any time. If a data block is to be programmed and an older copy already exists, then the older copy is overwritten. A code block is defined by six terms:

Block number	Type	Name
Version	Size	Starting segment (if applicable)

Note that the version number does not reflect the version of the firmware installed but rather the version of the program that wrote that specific block of code. If the block was written by the firmware then it will reflect the firmware version.

The physical flash device can be broken into a number of logical (virtual) flash devices. Each virtual flash is independent of the other virtual flash. If an erase occurs on one virtual flash, it won't affect the contents of the other virtual flash.

The Flash Manager FLASHMAN.HEX is a host side utility that can add data blocks, remove data blocks, and erase the entire flash. FLASHMAN displays the contents of the flash memory in the ProPalette. It is divided into two sections, virtual flash 0 (VF0) and virtual flash 1 (VF1). See figures 1 and 2 respectively. The top part of the screen lists the code blocks that are stored in the virtual flash while the bottom half of the screen lists the menu options that are available to the operator.

° **Menu options:** all options are menu driven and self-explanatory, they are executed by pressing the "Enter" <cr> key.

(H) Hex Download & Program into Flash
initiate a firmware download and burn it into flash memory

(R) Remove a data block from Flash
erase a specific data code block

(E) Erase this Virtual Flash
erase all data blocks within the virtual flash

(G) Garbage Collect
erase deleted Blocks and optimize remaining datae

(V) set Virtual flash
change between virtual flash's

Menu choices not defined are used by the software developers and not of use to Service.

- **Common code blocks:**

  There are two code blocks that are common to both Virtual Flashes, block (8) Copyright and block (9) Flash_types. These blocks are written by the monitor and will be replaced if erased.

- **VF0 code blocks**

  Virtual Flash 0 characteristically contains the configuration parameters for the ProPalette that are established by the alignment station and must be maintained when power is removed from the unit. The removal of any of this information will seriously impact the functionality of the unit. They include:

Control Code	defl parms desc	defl parms
XY Gridpoints	Cos4 gridpoints	Dfoc Gridpoints
Serial number	Cal Data Desc	Autoluma data

  - Control Code –firmware that runs the ProPalette
  - Defl parms and Defl parms desc – high-density parameters that are calculated whenever the unit is powered up during the "initialization" display.
  - XY Gridpoints – geometry parameters determined during alignment
  - Cos4 Gridpoints – Cos4 parameters determined during alignment
  - Dfoc Gridpoints – Dynamic focus parameters determined during alignment
  - Cal Data Desc – header information that defines the structure of the gridpoint data
  - Autoluma data – Default autoluma data used during the calibration process prior to an exposure
  - Serial number – as entered by the Service operator

VF1 code blocks

Virtual Flash 1 typically contains the configuration parameters for the ProPalette that are set by the operator or the system and must be maintained when power is removed from the unit. The removal of any of this information will result in the use of the default value of the parameter. They are self-explanatory and include:

SCSI Bus ID	SCSI termination	Leave Leader
Film Type	Camera back	Language
Pacing	Frame count	Error history

A code block will be present in vFlash1 if the default choice in the LCD display was changed at any time.

Running FLASHMAN.HEX

Know location of current FLASHMAN.HEX file – (firmware version dependent)
Terminal emulation program (ProComm Plus) must be available. See Notes Knowledge Base bulletin 980714142633JF for correct configuration. If a different terminal emulator program is used, ensure that the configuration parameters are set to the indicated values.
Know how to disable/enable watchdog timer. See Notes Knowledge Base bulletin 980325134018JF
Know how to enable/disable Monitor mode. See Notes Knowledge Base bulletin 981007093818JF
Know how to upload a hex file to the ProPalette. See the ProPalette Service manual, section 4 Troubleshooting and Diagnostics – Configuring a PC to Upload a Hex File

Procedure:

Disable watchdog timer
Enable Monitor mode
Connect ProPalette to computer through COMM port
Turn on ProPalette
Run terminal emulator
Confirm communication to ProPalete
Upload FLASHMAN.HEX to ProPalette
Run FLASHMAN.HEX by typing the command g 0<cr> Virtual Flash 0 will be displayed by default, see Fig.1.
Perform the necessary operation (see examples)
Exit the terminal emulator
Shut down the ProPalette
Enable watchdog timer
Disable Monitor mode
Turn on the ProPalette and verify that it functions properly

Examples:

Reload firmware

Confirm you are in vFlash0.
Remove the Control Code by entering the commands:

R<cr>
1<cr>

Note that code block (1) is gone
Upload the new Control Code by entering the commands:

H<cr>
1<cr>

Respond to the question "Enter data name string" with:

the_firmware<cr>

At the prompt "Ready to receive hex file"

Press Pg Up
R<cr>

Type in the fully qualified path to the xxCNTRL.HEX file if it isn't in the active directory

d:\path\xxCNTRL.HEX<cr>

xx = KA for the ProPalette 8000
xx = VT for the ProPalette 7000

After the upload is complete, wait until the flash is programmed and the FLASHMAN menu re-appears.
Note that code block (1) is back

Swap between virtual flash

To change between each virtual flash, type in the commands: v<cr> and then either 0<cr> or 1<cr> depending on which virtual flash you want to display.

Erase entire vFlash1

Change to virtual flash 1 by typing in the commands: V<cr> and then 1<cr> vFlash1 will be displayed, see Fig 2

To erase vFlash1, type the command E<cr>. The system will ask for a confirmation and you must respond with Y<cr>. When the screen refreshes, all of the code blocks will be gone and the display will state that vFlash1 is empty.

The default code blocks will be initialized when the unit is re-set and the default user parameters will be in effect.

Erase single code block

Change to virtual flash 1 by typing in the commands: V<cr> and then 1<cr> vFlash1 will be displayed.

To remove the Error History type in the command R<cr> and then 20<cr>. When the screen refreshes, verify that code block 20 has been deleted.

To delete a different code block, determine the number of the code block from the display of vFlash1 in FLASHMAN and follow the same instructions.

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Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**05/25/99**
Product Type:	**Film Recorder**	**Document #:**	**990525083938JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Hardware**		

Adaptec 1542 SCSI Controller

Category:
The purpose of this message is to alert service providers of a problem that customers may experience when communicating between an Adaptec 1542 SCSI card in a Wintel PC and a ProPalette that has firmware version 567/707 installed.

Product Affected:
ProPalette 7000 and ProPalette 8000

Details:
A problem in firmware version 567/707 will cause the RasterPlus driver to incorrectly report that the ProPalette is either disconnected, busy or off. This firmware was only available from the Polaroid web site to resolve a SCSI problem encountered by the G3 Macintosh. No product was shipped from the factory with this version.

Resolution:
There is no work around for this hardware/software configuration. A new version of the firmware, 568/708, which will work with this combination is being tested and will be available from the Polaroid web site. The new firmware will address this SCSI issue, supplementary film names have been added to the "Lock Film Names" menu and the "Lock Camera Type" function has been implemented in the LCD menu.

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EI Service Bulletin — Polaroid Knowledge*Base

Product:	ProPalette 7000, ProPalette 8000	Date:	06/02/99
Product Type:	Film Recorder	Document #:	990602103008JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Hardware		

New Monitor Mode

- **Category:**
  The purpose of this message is to alert service providers of an alternative method to set "Monitor Mode" in a ProPalette that does not require the removal of the outer shell.
- **Product Affected:**
  ProPalette 7000, ProPalette 8000
- **Details:**
  Monitor Mode refers to the rudimentary operating system that is hard coded into the on-board microprocessor. It is used to provide base level control and communication to the ProPalette. Monitor mode is used to communicate with the ProPalette through its serial port.

  The newest method is to power up with two keys pressed on the keypad. Note that this is only available on the new ProPalette 8000 plus series or on an earlier ProPalette that has an upgraded Digital board.

  To activate Monitor Mode from the front panel, power down the unit, press the scroll-up and scroll-down keys simultaneously while applying power. The unit powers up in the Monitor mode.

  Restart or reset the system in the normal fashion to return to standard mode.

  This method will only work with digital board 1F5570A Is06 or higher. If an earlier issue digital board is used, this method will work if the EPROM U103 has been upgraded with the ProPalette ROM v548 P/N102423.

  Procedure:

  Replace EPROM U103 on Digital board 1F5570A with part number 102423.

  Verify proper operation.

  Ordering Information:

Polaroid Corporation
201 Burlington Rd
Material Services
Bedford, MA 01730

Telephone: 800-343-4846 or, (781) 386-5649
Fax: (781) 386-5606
e-mail: Parts-Department@Polaroid.com

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EI Service Bulletin

Polaroid **Knowledge*Base**

Product:	**ProPalette 7000**	**Date:**	**06/04/99**
Product Type:	**Film Recorder**	**Document #:**	**990604102024JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

Green Tint Resolution

Category: Performance
The purpose of this message is to alert service providers of a solution to the overall green color cast to their images. This will be apparent when an image is exposed onto Kodak Elite II film.

Product Affected:
ProPalette 7000

Details:
The color transmission characteristics of the filters used in the ProPalette 7000 have changed due to process variations in the manufacturing of the filters. The color properties for which the film table was designed have changed appreciably. Since the manufacturing inventory contained a mix of old and new filters, the color cast problem is not apparent in all units and cannot be determined by a date code.

Resolution:
To determine if the unit has a problem, expose the GRAYCARD.TIF image to Elite II film and evaluate the flat field for color purity. The color should be gray without a green tint. If a green tint is apparent, the following procedure should be followed.

If the color correction is necessary, then the unit serial number must be changed. A new firmware version, 708, has been released that will interrogate the unit serial number and make the correction to the color balance if the serial number has been modified properly. The new firmware is available from the Polaroid web site. The utility, FSN.EXE, to alter the unit serial number is attached to this message and available from Service.

Procedure
Upgrade the firmware to the ProPalette in the normal manner using the FWLOAD utility over the parallel port. Attach the parallel cable between your PC and your ProPalette. From the DOS prompt type:

FWLOAD vtcntrl.hex

IMPORTANT: Once the firmware upgrade software has begun, do not attempt to interrupt the process. Do not press any buttons or interrupt the power to the film recorder. This can cause the flash memory in the ProPalette to become corrupted. If this happens, your film recorder will require service.

The DOS utility FWLOAD will run some preliminary checks, upload the firmware to your ProPalette, and instruct you to wait about 40 seconds before attempting any further action with the ProPalette. Once the firmware is loaded into flash memory, the ProPalette will reinitialize and run its startup diagnostics.

Only the firmware gets changed. SCSI ID, termination status, frame counts, etc. are unaffected by the firmware upgrade.

Note: If you are using LPT2 instead of LPT1, add the character "2" at the end of the DOS command, by typing:

FWLOAD vtcntrl.hex 2<cr>

Install the FSN.EXE host side utility onto the PC. This utility will add the letter "F" as the eighth character to the unit serial number. Note: Do not perform these following steps if the observed color is acceptable.

Execute FSN from the DOS prompt to modify the unit serial number by typing the command:

FSN –interface=parallel

If you are using LPT2 instead of LPT1, modify the command to:

FSN –interface=parallel –lpt=2

There is no similar utility for a Macintosh computer.

Note: Be sure that the color correction is required. The only way to reverse this operation is to have the unit sent back to Service.

Perform a hard reset on the ProPalette. The new firmware will interrogate the serial number and make the proper adjustments to the color.

From the LCD/Keypad, select Diagnostics/Power-on Message. Confirm that on the initial display the firmware version is 708 dated May 26 99 and that on the second display the serial number has been successfully modified by adding the character F in the eighth position.

Verification

Re-expose the GRAYCARD.TIF image to Elite II film and evaluate the flat field for color purity. The color should be gray without a green tint. If a color tint is still visible then return the unit to Service for additional repair.

APPROVALS:

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Polaroid **Knowledge*Base**

EI Service Bulletin

Product:	Raster Plus For Macintosh	Date:	07/13/99
Product Type:	Film Recorder	Document #:	990713091546JF
Product Group:	PDI	Posted By:	Jordan Freedman
Category:	Software		

Errors Printing with PostScript Page-Layout Programs

Category:
The purpose of this message is to alert service providers of a solution to a problem that RasterPlus for Macintosh customers may experience.

Product Affected:
RasterPlus for Macintosh

Details:
Using the new released version of RasterPlus for Macintosh may generate error messages or display errant behavior with PostScript page-layout programs. Customers will expect to be able to print from all PostScript applications because RasterPlus is a PostScript level 2 and 3 RIP.

Printing from PowerPoint works well, but problems have been observed with QuarkXPress 3.32 and 4.0, Illustrator 7 and 8, and PageMaker 6.5. Either error messages (Quark 4.0, PageMaker 6.5), the image is dramatically cut off (Quark 3.2, PageMaker 6.5), the copies to print are "0" so it doesn't print (Illustrator, PageMaker), or the colors are extremely warped (Illustrator 7 and 8). The developer of the program, Graphx, knows about these problems and is presently fixing them, but the shipping version will not have any fixes.

Resolution:
An update has been made available for Quark 4.0 and above users from the developer web site at:

http://www.graphx.com/support/rasterplus_macintosh_updates203.htm

When you connect to this link, scroll down to find four Polaroid specific PPD files. The PPD file will resolve the random Postscript errors that have been generated from printing directly out of Quark 4.0 and later..

Download the appropriate PPD file from the web site:
Place this file in the System folder: Extensions folder: Printer Descriptions folder. Thus replacing the existing RasterPlus or device specific PPD.
Restart the computer
In RasterPlus 2.03 go to the tools menu and select create printer. You will be prompted to name the printer. Name and click OK. (RasterPlus will now create a new desktop printer using the new PPD file)
Launch Quark under the file menu go to Page Setup. Once in page setup select the setup tab.

Change Printer Description selection to the PPD we've just added.
Click on the Pagesetup button at the bottom of the dialog box. (This will bring up your LaserWriter Postscript printer pagesetup preferences.
Format for: Should be set to the RasterPlus printer you want to use.
Paper: Should match the media you are using.
Orientation: Should match your expected output orientation. Click OK
Once back in the Quark page setup window click on the printer button at the bottom. This will bring up the LaserWriter print dialog box. Make sure the printer selected is the device you want to output to. Make sure the destination is Printer. Note: By changing destination from printer to file, will cause the desktop printer to create and save the .PS file in the location of your choice. This will not print directly to the RasterPlus queue.
Once you've confirmed the device and destination click Print. This will bring you back to the Quark Page Setup window where you must click Print from here.

Your file will now spool to the desktop printer, create a Postscript file (.PS) then advance into the RasterPlus queue. Once in RasterPlus the file will either sit in the queue or start processing out to your device. This will be determined by how your "Send RIP output to" options are setup in RasterPlus. You should now be ready to output directly from all versions Quark.

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EI Service Bulletin

Polaroid **Knowledge*Base**

Product:	**ProPalette 7000, ProPalette 8000**	**Date:**	**07/14/99**
Product Type:	**Film Recorder**	**Document #:**	**990714090321JF**
Product Group:	**PDI**	**Posted By:**	**Jordan Freedman**
Category:	**Software**		

SWERR Error Message - Unknown analog board version

Category:
The purpose of this message is to alert service providers of a solution to a problem that ProPalette Service providers may experience when replacing an Analog board.

Product Affected:
ProPalette 7000, ProPalette 8000

Details:
Immediately after replacing the Analog board in a ProPalette, the following error message may appear after the firmware version is displayed in the LCD display during the power-up sequence self test.

SWERR: dp2layer.cpp, 215: Unknown analog board version

Resolution:
The firmware must be upgraded to the latest version. A unit may give the "Unknown analog board version" error message, if the analog board is changed without upgrading the firmware on the Digital board. The older firmware may not recognize the newer analog boards. All board upgrades are hardware backwards compatible with the proper firmware.

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Polaroid Digital Products

Service BULLETIN KB#981113073344GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 2, No. 10

From: New Products Service Support Group
Date: November 11, 1998
Subject: **PolaColor Insight vers 2.X and Win 98**

- **Category: Product Alert**
  The purpose of this message is to alert Service providers of a problem that occurs when installing PolaColor Insight version 2.X on PC's running Window 98.

- **Products Affected:**
  SprintScan 35, SprintScan 35ES, SprintScan 35/LE

- **Details:**
  The customer has upgraded their Windows 95 to Windows 98. As soon as the PolaColor Insight application opens the user gets a message stating that "No scanners are found." A check in the Device Manager shows a listing for a Scanner, Polaroid Scanner, or ADPT Scanner.

- **Resolution:**

  Windows 98 uses a new way of recognizing scanners. This new method is known as Still Imaging Technology. Using this new technology, a scanner can operate under Windows 98 without TWAIN or an ASPI layer. Under this new system a scanner is known to the system as an "Imaging Device." PolaColor Insight, version 2 and later, will only recognize a scanner if it appears in the Device Manager as an Imaging Device.

  There are two solutions to this problem:

  Solution 1 –
  Note: This solution is a copy of the one found in the PolaColor Insight ReadME file.

  1. Open the Device Manager
  2. Select the Scanner listing with the mouse pointer
  3. Click on the Remove button
  4. Re-boot the PC.
  5. After the Windows 98 re-boots, open the Device Manager. Check and see if the Scanner is now listed as an "Imaging Device."
  6. If there is no Imaging Device Listed - go to Solution 2.

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Solution 2 -

1. Use the Find command and look for a file named Polascan.inf. If found, delete the file.
2. Uninstall Adaptec EZ-SCSI or EZ-SCSI lite. **Note:** In most cases a feature of EZ-SCSI is the reason the SprintScan is not recognized as an Imaging Device. One of the features of EZ-SCSI is a generic scanner device driver. This driver provides a simple control for a generic scanner. It's this driver that blocks the SprintScan from being recognized as an Imaging Device.

   You can check the Registry editor and verify the Adaptec driver is the cause of the problem. Look in the following path: root drive letter (usually C) \HKEY_LOCAL_MACHINE\Enum\SCSI\ POLAROID35MM_____5\ROOT&SCSIADAPTER&0000X0. Click on the folder ROOT&SCSIADAPTER… and view it's contents in the right hand pane of the Registry window. If the class type is "ADPT Scanner" then the EZ-SCI scanner device driver is causing the scanner not found problem.
3. Open the Device Manager
4. Select the Scanner listing with the mouse pointer
5. Click on the Remove button
6. Re-boot the PC.
7. After Windows 98 re-boots, open the Device Manager. Check to see if the Scanner is now listed as an "Imaging Device."
8. Re-install EZ-SCSI or EZ-SCSI lite.

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Polaroid Digital Products Service BULLETIN KB#981120063728GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 2, No. 11

From: New Products Service Support Group
Date: November 18, 1998
Subject: **New Firmware v1.80 Released**

- **Category: EI Service Bulletin**

  The purpose of this message is to alert Service Providers regarding new firmware that has been released for the SprintScan 45 and 45 Pro. The new firmware corrects problems with Windows 98, Windows NT and SCSI compatibility.

- **Products Affected:**

  SprintScan 45 and SprintScan 45 Pro

- **Details:**

  Reports from the field indicate that the SprintScan 45 has SCSI and operating system compatibility problems with Windows 95, 98 and NT version 4. In response to the reported problems the manufacturer has revised the firmware. A new version 1.80 firmware (the previous version was 1.65) has been tested and proven to solve these reported issues. The new firmware corrects these problems:

  - *Windows 98 compatibility – Scanner is now fully compatible*
  - *Windows NT version 4 compatibility (i.e. Scanner not found errors or scanner disappears off SCSI bus after a period of time) – problem corrected*
  - *General SCSI bus problems (i.e. Scanner not recognized on the SCSI bus, scanner disappearing from the SCSI bus, problems being recognized by some Host Adapter cards esp. Adaptec 2940 family boards – problem corrected*

- **Resolution:**

  The manufacturer began shipping scanners with version 1.80 firmware as of November 1998. Scanners with the new firmware may be identified by the suffix “F” in the serial number (last character of the serial number). The new software will be installed in SprintScan 45’s beginning with serial number K801218F (this is the estimated cut-in serial number).

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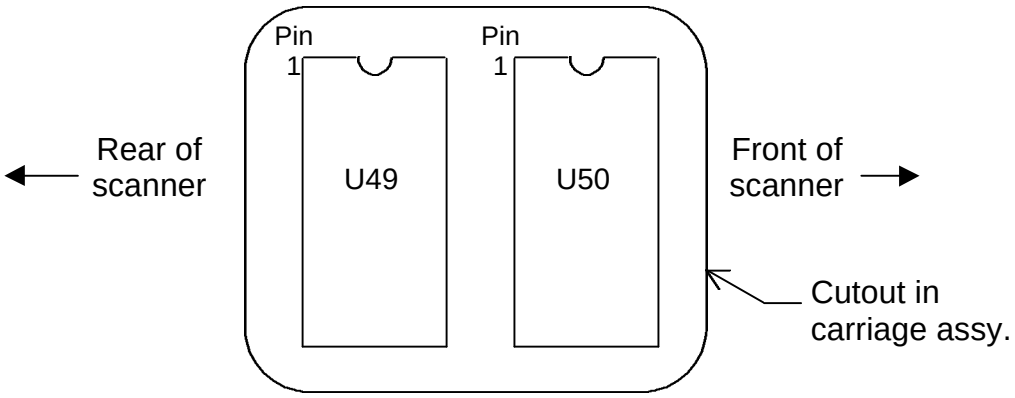
Upgrading the firmware in the SprintScan 45 requires that two EPROM's be removed and replaced. The EPROM's are labeled U49 and U50. Use the following procedure to replace the firmware:

Tools and Materials Required:

- Anti-static wrist strap
- EPROM remover tool
- Philips screwdriver

Procedure:

1. Before removing power from the scanner make sure that the carriage is in the home position. Then, remove the power cord and SCSI cable from the back of the scanner. **Note:** The cover removal procedure in Steps 2, 3 and 4 can found on page 7 of the SprintScan 45 Service Manual. The manual is on the Electronic Library CD.
2. Remove the six Philips screws that affix the cover to the base of the SprintScan 45.
3. After removing the screws, turn the unit over so that the front end of the scanner faces to your right.
4. Slowly lift the cover off the unit. Note that the cover can only be partially lifted off, as you will need to disconnect a lead from the LED panel on the cover that connects to the main circuit board in the base of the unit.
5. Connect the anti-static wrist strap ground clip to bare metal on the carriage assembly (but not on the two carriage chromed rails) and the wrist strap to the wrist you will use to handle the EPROM's.
6. The two EPROM's can be viewed and removed through the cut out in the center of the cast metal carriage assembly. Remove the old EPROM's.
7. The two new EPROM's, U49 and U50 need to be put back in the correct sockets. See illustration below.
8. Reassemble and test.



Version 1.80 firmware will be stocked by Parts Logistics. The set of EPROM firmware, U49 and U50 is available as Part Number 542-21-327512.

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CAUTION: If other sources are used to obtain these parts, it should be noted that only 120 or 150 nanosecond IC's should be used for this application. IC's with slower access speeds will not work correctly.

Order through normal sources

Polaroid Corporation
Material Services
201 Burlington Road
Bedford, MA 01730 USA
Telephone: 800.343.4846 or. 781.386.5649
Fax: 781.386.5606
Cc:mail – Part-Department@polaroid.com

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Polaroid Digital Products Service BULLETIN KB#9901299095746GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 3, No. 1

From: New Products Service Support Group
Date: January 27, 1999
Subject: **PolaColor Insight vers 2.X and Win 98 Update**

- **Category: Product Alert**
  The purpose of this message is to alert Service providers of a problem that occurs when installing PolaColor Insight version 2.X on PC's running Window 98. Note: This bulletin replaces SprintScan Bulletin V2, N 10 dated November 11, 1998. Bulletin V2, 10 should be discarded.

- **Products Affected:**
  SprintScan 35, SprintScan 35ES, SprintScan 35/LE

- **Details:**
  The customer has upgraded their Windows 95 to Windows 98, or is using a PC that came with Windows 98. As soon as the PolaColor Insight application opens the user gets a message stating that "No scanners are found." A check in the Device Manager shows a listing for a Scanner, Polaroid Scanner, or ADPT Scanner.

- **Resolution:**

  Windows 98 includes a new technology to recognize scanners known as "Still Imaging." Using this new technology, a scanner can operate under Windows 98 without TWAIN or ASPI. Unlike Windows 95, Windows 98 recognizes a scanner as an "Imaging Device." PolaColor Insight, version 2, will only recognize a scanner if it appears in the Device Manager as an Imaging Device. When you launch PolaColor Insight and you see an error message telling you that no scanners are found, it's probably not recognized as an Imaging device. To fix the problem, follow the steps below.

  Step 1 – Is the scanner seen in the Device Manager?
  If it's listed as Unknown Device, Scanner, or Polaroid Scanner; skip to Step 2. If there is no scanner listed, read on…
  1a) Note that the scanner is recognized a bootup time (Plug & Play adapters):. The first time you connect a scanner to a PC running Windows 98 you must see the scanner recognized during bootup. In most cases you see the board's on screen listing just after the CNTRL>A prompt listing (for changing adapter configuration settings). If the adapter has a BIOS you will see a listing for any

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SCSI devices (example: Polaroid 35MM) that are connected to it named along with their SCSI ID number.
1b) If the card is an older ISA type (example: Adaptec 1505) you must use a utility like Adaptec's SCSI explorer to see if the scanner is recognized.
2) Scanner hardware recognition
The hardware recognition step is basic. If the scanner is not recognized something is wrong with the scanner, host adapter, or the cabling. Don't bother to do anything else at this point besides getting the scanner recognized. If it's not recognized at bootup it won't appear in the Device Manager. Note: At this time, it does not matter whether ASPI software is installed correctly or, even installed…you can worry about this later. You just have to be concerned that the miniport driver for the host adapter is the right one and correctly installed. Example: The Advansys 922 board uses ASC.mpd as it's miniport driver. You will find this file in C:/WINDOWS/SYSTEM/IOSUBSYS. When the scanner is, at least, recognized got to Step 2.

Step 2 Check for two required .sys Files
Two critical Windows 98 files that are needed to have a scanner recognized as an "Imaging Device" must be present on the host PC. These files should load from the Windows 98 CD the first time the scanner is recognized (you get a message telling you to put the Win 98 CD in the drive). These files are **not loaded** in a standard Win 98 install, or when upgrading from Win 95. For some reason they sometimes don't get installed. The files are:

SCSImap.sys
SCSIscan.sys

After installation, both files reside in the following path - C:\WINDOWS\SYSTEM32\DRIVERS

The two .sys files are in a compressed CAB format on the Windows 98 installation CD and, therefore, not easy to get. One way to get the files is to extract them from the compressed file using a procedure outlined in Microsoft Knowledge Base article Q129605 named "How to Extract Original Compressed Windows Files." Find the article on the web at :
http://support.microsoft.com/support/kb/articles/Q129/6/05.asp

Once you are sure that the files are installed, go to Step 3.

Step 3 – Check for and Delete: Polasan.Inf
Use the Find command and look for a file named Polascan.inf. If found, delete the file. In most cases, you will only find this file if the customer had the scanner working with the old SprintScan software with Win 95 and upgraded to Win 98. After you are sure the file is not on the system do the following:

1. Open the Device Manager
2. Select the Scanner listing with the mouse pointer
3. Click on the Remove button
4. Re-boot the PC.

After Windows 98 re-boots, open the Device Manager. Check to see if the Scanner is now listed as an "Imaging Device." If it's still shown as a Polaroid scanner, go to step 4.

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Step 4– Is scanner registered as Adaptec generic scanner?

1. Open the Registry editor and check if an Adaptec scanner driver is the cause of the problem.
2. Look in the following path (Note: this example applies to a SprintScan 35ES or Plus): C:\HKEY_LOCAL_MACHINE\Enum\SCSI\POLAROID35MM_____5 \ROOT&SCSIADAPTER&0000X0. Click on the folder ROOT&SCSIADAPTER… to view it's contents in the right hand pane of the Registry window. If the class type is "ADPT Scanner" **Note:** In most cases a feature of EZ-SCSI is the reason the SprintScan is not recognized as an Imaging Device. One of the features of EZ-SCSI is a generic scanner device driver. This driver provides a simple control for a generic scanner. It's this driver that blocks the SprintScan from being recognized as an Imaging Device.
3. Uninstall Adaptec EZ-SCSI or EZ-SCSI lite. Check and be sure if the user has his or her original disks before uninstalling.
4. Open the Device Manager
5. Select the Scanner listing with the mouse pointer
5. Click on the Remove button
6. Re-boot the PC.
7. After Windows 98 re-boots, open the Device Manager. Check to see if the Scanner is now listed as an "Imaging Device."
8. The user can now re-install EZ-SCSI or EZ-SCSI lite.

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Polaroid Digital Products Service BULLETIN KB#990315095220GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 3, No. 2

From: New Products Service Support Group
Date: March 11, 1999
Subject: **PolaColor Insight Pro version 3.0 Introduced**

- **Category: Software Info Bulletin**

  The purpose of this message is to alert Telephone Service and Repair Service providers of important changes in version 3 of PolaColor Insight software.

- **Products Affected:**

  All SprintScan's

- **Summary:**

  PolaColor Insight version 3 has been changed since version 2. A partial list of the changes follows:

  a) ***Change!*** – Version 2, when run under Windows 98, required the scanner to register (in the Device Manager) as an "Imaging Device." This requirement does not apply to Insight Version 3.
  b) ***New!*** – Support for the SprintScan 45
  c) ***New!*** – Tone Curve tab adds tone curve correction, white and black eyedroppers.
  d) ***New!*** - Support for the newly released SprintScan 4000 scanner
  e) ***New!*** – PolaColor Insight "plug-in" for the Macintosh

- **Details:**

  PolaColor Insight and Windows 98
  Version 2 of PolaColor Insight would only recognize a SprintScan under Windows 98 if it was registered as an "Imaging Device." (see SprintScan Service Bulletin V3, N1). Version 3 of Insight drops this requirement.

  When installing a SprintScan under Windows 98 it should appear in the Device Manager as a "Polaroid Scanner." For reliable operation, ASPI must be functional and up to date with latest revisions from Adaptec (version 4.57 as of the date of this bulletin) and the miniport driver for the SCSI host adapter that's used should be the most current revision. You can check for a functional ASPI layer with the program named ASPICHK.exe that's available on the Adaptec website. As of the date of this bulletin it is available at the following address: http://www.adaptec.com/cgi-bin/drivers.pl. Note that Adaptec has some miniport drivers that are just for Windows 98, use the special driver if it exists.

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SprintScan 45 Support
PC: Version 3 of PolaColor Insight fully supports the SprintScan 45. Batch scanning capability is not included in this version. Users who require this capability can continue to use SprintScan version 1.0.3. Batch scanning capabilities will be added in future versions of PolaColor Insight for the PC.

Macintosh: Batch scanning capability is supported in the Mac version of the software as a Scripted feature. When running on a Macintosh system, PolaColor Insight software can automatically execute multiple scans to capture several different areas of the image, with different correction and scanning settings for each area. This feature is explained, in detail, starting on *page 68* of the Users Guide that's included on the Insight CD-ROM.

Tone Curve Controls
Tone curve correction is added in this version. The tone curve correction controls appear on a new tab named "Curves." The user selects the Curves tab to define whitepoint or blackpoint or for adjusting highlights, midtones or shadows using tonecurves correction. The tone curves let the user selectively adjust the brightness values of the highlights, shadows or the tones between them. You can also independently adjust the red, green, or blue values individually.

SprintScan 4000 Support
The new SprintScan 4000 is supported by Insight 3. When a SprintScan 4000 is connected to a computer, additional user controls appear. The Preview tab adds a control named "Frame Number." This control allows the user to select an individual frame in a filmholder to be scanned. The frame number increments from 1 to 6 for the film strip holder and 1 to 4 for the slide holder. The scanner automatically advances to the selected frame when the user selects the Preview button.

Two new selections appear in the Scanner menu when a SprintScan 4000 is detected. One selection is named "Eject Film." This selection allows the user to automatically eject a filmholder or APS cartridge (optional accessory). A second selection named "Update Film Carrier" resets the Frame Number box to the current frame after the film carrier has been changed.

Adobe PhotoShop Plug-in" for the Macintosh
A plug-in installer is now part of the Insight software package for the Macintosh, only. The plug-in works with Adobe Acrobat, Adobe PhotoDeluxe or any image editing program that supports Adobe type plug-ins. If the user decides to use the plug-in, they must install it using a separate installer program that's included.

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Polaroid Digital Products Service BULLETIN KB#990630104111GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 3, No. 3

From: New Products Service Support Group
Date: June 30, 1999
Subject: **SCSI Troubleshooting for Windows 95/98 PC's**

- **Category: EI Service Bulletin**
  The purpose of this bulletin is to give Telephone Service providers general SCSI bus information to help in troubleshooting common SCSI bus problems on a PC.

- **Products Affected:**
  All SprintScan scanners running in a Windows 95 or 98 environment

- **Details:**

  Problem: When the PolaColor Insight application opens it reports that no scanners are found.

  Solution: There are a number of steps to follow, in order, to have a scanner recognized on the host PC's SCSI bus.

  Step 1 – Is the scanner seen in the Device Manager? (See example Figure 2)

  One way to view the Device Manager is to right-click on the My Computer icon and choose "Properties"

  - Win 95 – If it is listed as a Polaroid Scanner. Go to **Step 2**
  - Win 98 – If it is listed as an Imaging Device. Go to **Step 2**
  - Win 98 – If it is listed as a Polaroid Scanner Go to **Step 3**
  - Win 95/98 If it is NOT seen and the Host Adapter (SCSI card) is a Plug and Play type go to **Step 1a)**
  - Win 95/98 If it is NOT seen and the Host Adapter is NOT a Plug and Play type go to **Step 1b)**

  Step 1a) - If the user has a PCI (Plug & Play) type host adapter, check and see if the host adapter and scanner are recognized at bootup time. The first time you connect a scanner to a PC running Windows 95 or 98 you *must* see the scanner recognized during bootup. In most cases you see the board's on screen listing just after a CNTRL>A prompt listing and before the point when the Windows 95 or 98 screen appears. If the adapter has a BIOS you will see a listing for any SCSI devices (example: Polaroid 35MM is the listing for a SprintScan 35) that are connected to it and their SCSI ID number. Example: An Adaptec 2940 and an Advansys 922 both have BIOS chips. If the scanner is not listed at bootup time, the card may be incorrectly installed. Example: board connector is not completely pushed into the mating connector on the PC's motherboard. After the SCSI card is installed correctly, go to **Step 1c)**

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Step 1b) - If the card is an older ISA type (example: Adaptec 1505 or 1505AE) you must use a utility like Adaptec's SCSI explorer to see if the scanner is, at least, recognized by Windows. Note that non-plug and play SCSI cards install differently than a plug and play board. The correct method to install these cards is included in this bulletin. After the SCSI card is installed, go to **Step 1c)**.

Step 1c) - Scanner hardware recognition
After the host adapter is correctly installed, the hardware recognition step is next. If the scanner is not seen in the Device Manager but, the host adapter is seen, something is wrong with the scanner, host adapter, the SCSI cabling or the PC itself. Don't bother to do anything else at this point besides getting the scanner recognized. **Note:** At this time, it does not matter whether ASPI software or a TWAIN interface is installed correctly…you can worry about this later. You must be sure that the miniport driver for the host adapter is the right one, it's the latest version and installed in the right place. A listing of many popular host adapter miniport drivers that lists their current version numbers can be found in **Table 1**. After you get the scanner recognized in the Device Manager but you still cannot Preview or Scan an image, go to **Step 2**.

Tip: Look for extra copies of the SCSI card miniport driver. If you find extra copies on the users hard drive, delete them. Example: The Advansys 922 board uses ASC.mpd as its miniport driver. You will find this file in: C:/WINDOWS/SYSTEM/IOSUBSYS.

Step 2 – Correcting ASPI layer problems in Windows 95 & 98

If the user has an Adaptec SCSI card go the **Step 2a)**
If the user has an Advansys SCSI card go to **Step 2b)**
Step 2a). - The easiest way to find problems with the ASPI layer is to have the customer download an executable program called ASPICHK.exe from the Adaptec website. Once the software is loaded on the customers PC they should run it. This application allows the technician to recognize problems like missing files and mismatched file version numbers. See Figure 1 for an ASPI check sample on screen display window. An Adaptec SCSI card requires the following four ASPI files (file version numbers are current as of the date of this bulletin):

WNASPI32.DLL, version 4.57, Location: C\WINDOWS\SYSTEM
WINASPI.DLL version 4.57, Location: C\WINDOWS\SYSTEM
APIX.VXD version 4.57, Location: C\WINDOWS\SYSTEM\IOSUBSYS
ASPIENUM version 4.57, Location: C\WINDOWS\SYSTEM

Troubleshooting Tools & SCSI Board Manufacturer Service Phone #'s

Adaptec: SCSIcheck.exe and the latest miniport drivers are available from Adaptec at http://www.adaptec.com/support/files/upgrades.html
Adaptec Tech Support Monday - Friday (except holidays) 6:00 AM - 5:00 PM Pacific Time. Call 1.408.934.7274. Worldwide support: check Adaptec's website

Advansys: SuperSCSI utility is included with Advansys card bundled with scanners. Win 98/95 Miniport drivers are available from: http://www.advansys.com/support/fastultra.htm Tech Support operates from 8:30AM to 5:30PM PST Monday through Friday (except holidays). Telephone: 800.525-7440 or 408.383.9400

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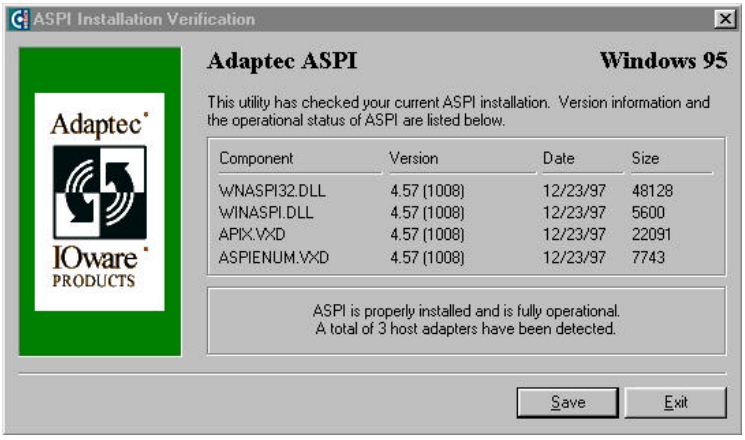

Figure 1 – Adaptec ASPIcheck display window

Step 2b) - Advansys does not supply ASPI for Windows 95/98 PC's on their SuperSCSI CD-ROM that is included with the ABP-922 SCSI card. The CD-ROM installs the miniport driver and the SuperSCSI troubleshooting application. Advansys relies on the fact that Windows 95/98 will install an ASPI layer in all new OS installations by default. The files Windows installs are:

- Winaspi.dll version 1.00, Location: C\WINDOWS\SYSTEM
- Wnaspi32.dll version 1.0.0.0 , Location: C\WINDOWS\SYSTEM
- Apix.vxd version 4.00.951, Location: C\WINDOWS\SYSTEM\IOSUBSYS

Tips:
1. If you run Adaptec's ASPI check application on a PC using the drivers listed above it will report that ASPI is NOT functional when, in reality, it is working OK. After you complete steps, 2a) or 2b) the scanner should work correctly.
2. Check and delete multiple copies of the ASPI DLL's on the users hard drive. Look for outdated versions mixed with newer versions. Keep the latest version and delete the old ones.

Step 3 – Windows 98: Scanner recognized as "Polaroid Scanner"

This symptom could mean that one or both of the following problems exist:
Problem 1 -The scanner is recognized by the PC as a generic type of scanner. In this case, PolaColor Insight will not recognize it. Go to **Step 3a)**.
Problem 2 – Missing .sys files. Go to **Step 3b**).

Step 3a) Scanner is listed in the Registry as a generic device

1. Open the Registry editor and check if an Adaptec scanner driver is the cause of the problem.
2. Look in the following path (Note: this example applies to a SprintScan 35ES or Plus): C:\HKEY_LOCAL_MACHINE\Enum\SCSI\POLAROID35MM_____5 \ROOT&SCSIADAPTER&0000X0. Click on the folder ROOT&SCSIADAPTER… to view it's contents in the right hand pane of the Registry window. Check to see if the class type is "ADPT Scanner" If it's not, skip to **Step 3b).**

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Tip:
In most cases, a feature of EZ-SCSI (from Adaptec) is the reason the SprintScan is not recognized as an Imaging Device. One of the features of EZ-SCSI is a generic scanner device driver that provides a simple control for a generic scanner. The generic driver blocks the SprintScan from being recognized as an Imaging Device.

3. Uninstall Adaptec EZ-SCSI or EZ-SCSI lite. Check and be sure if the user has his or her original disks before uninstalling.
4. Open the Device Manager
5. Select the Scanner listing with the mouse pointer
6. Click on the Remove button
7. Re-boot the PC.
8. After Windows 98 re-boots, open the Device Manager. Check to see if the Scanner is now listed as an “Imaging Device.”
9. The user can now re-install EZ-SCSI or EZ-SCSI lite.

Step 3b) Missing .sys files
Two critical Windows 98 files that are needed to have a scanner recognized as an "Imaging Device" must be present on the host PC. These files should load from the Windows 98 CD the first time the scanner is recognized (you get a message telling you to put the Win 98 CD in the drive). These files are **not loaded** in a standard Win 98 install, or when upgrading from Win 95. For some reason they sometimes aren’t installed. The files are:

SCSImap.sys
SCSIscan.sys

After installation, both files reside in the following path - C:\WINDOWS\SYSTEM32\DRIVERS

The two .sys files are in a compressed CAB format on the Windows 98 installation CD and, therefore, not easy to get. One way to get the files is to extract them with a shareware application called *WinZip* that’s available in many locations on the Worldwide Web or direct from htttp:\\www.winzip.com

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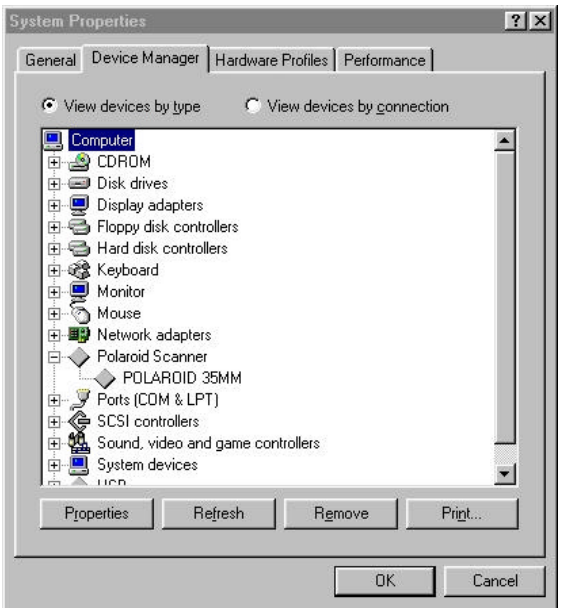

Figure 2 – Windows 95 Device Manager Example
(Shows listing for SprintScan 35)

Host Adapter Model	Type	Miniport Driver &Version
Adaptec AHA - 2940 & 2940W 2940AU,2940UW	Plug-n-Play	Aic78xx.mpd ver. 2.3
Adaptec AHA - 2940U2W 2930U2	Plug-n-Play	Aic78u2.mpd vers. 3.03
Adaptec AHA - 3940, 3940W 3940U, 3940UW 3940AU, 39040AUW	Plug-n-Play	Aic 78xx.mpd ver. 2.3
Adaptec AVA - 2902	Plug-n-Play	Aic 78xx.mpd ver. 2.3
Advansys 922 & 3922	Plug-n-Play	Asc.mpd ver. 2.9D
Adaptec AVA - 1505, 1502AE	ISA (NOT plug and play)	Sparrow.mpd Ver. 2.05

Table 1 – SCSI Host Adapter Information

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Installing an Adaptec® 1505 or 1502AE ISA type Host Adapter In a WIN 95 or 98 PC (non plug and play)

Note: In most cases, you will need the original Windows 95 or 98 Installation CD-ROM for this procedure.

Step 1 Open the Control Panel (Start menu/Settings/Control Panel)
Step 2 Select (Double-click) “Add New Hardware” Icon
Step 3 The Add New Hardware Wizard now asks; “Do you want to search for new hardware.” Select “No” and click on the Next button.
Step 4 Next you are asked to select the Type of Hardware. Select SCSI controllers. It’s near the bottom of the scrolling list. Click on the Next button.
Step 5 Select from the Adaptec list the host adapter you are installing. Depending on the board you have, select Adaptec AVA -1505 SCSI Host Adapter or Adaptec AVA -1502 SCSI Host Adapter. Click on the Next button after making the selection.
Step 6 Next; you will see a dialog box saying “Windows can install your hardware, using the following settings.” Note two items: The two digit “Interrupt Request” number Windows 95 assigns and a three digit Port Address. Example: Interrupt Request 11 and Port address 340h.
Step 7 Click on the Next button.
Step 8 The system will now ask you to place the Windows 95 installation CD-ROM in the CD-ROM drive to install resources needed for the Host Adapter. Note: It will only do this if you do not have the drivers and files needed for the Host Adapter pre-installed. Follow the instructions carefully. After the installation is complete, shut down the computer

Second - Install the SCSI Host Adapter board.

Step 9 Set the IRQ jumper on the board to the IRQ number that you noted in the first part of this procedure. Example: The default IRQ setting for the AVA - 1502AE is 10…If this IRQ was noted in Step 6, don’t change the jumper position. The default IRQ setting for the AVA - 1505 is 11…If this IRQ was noted in Step 6, don’t change the jumper setting. If the IRQ you noted in Step 6 was not the default, change it now. For instructions on changing the jumpers, consult the Installation Guide that came with the board (or, look on the board for a jumper setting chart). Set the port address jumper to the address you noted in Step 6. If what you noted is the board default setting (typically, 140h) don’t move the jumper. If the setting you noted is 340h, change the jumper setting.
Step 10 Install the Host Adapter board per the Installation Guide in one of the ISA slots (usually a black colored connector) in your PC. Choose a slot so that the SCSI board won’t touch the sides of any other board when it’s installed.
Step 11 Connect a SCSI device (example: a slide scanner) to the connector on the Host Adapter board (outside the PC) and turn on the power to the device and then to your PC.

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Step 12 Install the EZ-SCSI Lite version 4.x or 5.x, using the instructions printed on the disk. This disk will update the SCSI files and drivers that were copied from the Windows 95 CDROM to the latest versions. After installation is complete, you will see a message asking if you want re-start your PC now. Click on the OK button and allow your PC to re-start

Note: EZ-SCSI Lite Version 4 does not install the sparrow.mpd driver needed for the 1505 board. The default sparrow.mpd driver that comes with the Windows 95 will remain. The latest drivers can be found on Adaptec's website at www.adaptec.com.

Step 13 Install the software for the SCSI device now. In most cases, you will have to re-start your PC when the installation is complete.

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Polaroid Digital Products

Service BULLETIN KB#990407170921GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 3, No. 4

From: New Products Service Support Group
Date: April 7, 1999
Subject: **SprintScan 4000 & Insight Software for Macintosh v3.0 - Known Problems**

- **Category: EI Service Bulletin**
  The purpose of this bulletin is to give Telephone Service providers information regarding known problems with PolaColor Insight version 3.0 for the Macintosh when used with the SprintScan 4000.

- **Products Affected:**
  SprintScan 4000

- **Details:**

  The following is a list of problems that might be reported by customers using the SprintScan 4000 with PolaColor Insight version 3.0 on a **Macintosh** computer. The problems will be fixed in version 3.1 of PolaColor Insight. Version 3.1 is scheduled for release in April 1999.

  1. **Problem:** Unknown error message type 173XX to 174XX (where XX is a number from 00 to 99) is seen by the user.

  These error messages will most often occur:
  a) When doing a “Preview” scan.
  b) Immediately after the user sees the message "Insert carrier until scanner grabs it" [and the carrier is not properly inserted and ready].

  Solution: Review the following procedure for inserting a carrier with the user: The procedure must be followed *before* clicking on the Preview button.

  a) Push the carrier into the scanner until the activity lamp (the yellow or green lamp, this depends on the date the scanner was manufactured) turns off.
  b) At this point, the user should let go of the carrier and let the scanner pull it inside. The holder automatically positions itself and is ready for scanning. When the carrier is in the ready position, the activity lamp is “on” steady and has stopped blinking.
  c) The user should click on the Preview button only after Step a) and b) are completed.

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2. **Problem:** Customer chooses any of the black and white films in the Profiles menu (on the Preview tab), or moves the Saturation slider (on the Color tab) to the B&W position and clicks the Preview button. The preview works normally. After the user clicks on the Scan button, the Progress dialog box reaches the point of "Writing image to file…". At this point, a dialog box appears with the text: Unknown error 27728 or Time out error -2003.

Solution: Scan the image in color. After scanning, open the image in PhotoShop and change Mode (on the Image menu) to Grayscale.

3. **Problem:** Insight locks up the Macintosh when writing the scanned file to the harddrive.

Solution: This problem is more likely to occur with pre-G3 Macintosh computers and when scanning at high resolutions. The frequency of this error appears low. There is no workaround for this problem. Recover from the error by restarting the computer (one method is to hold down the Apple and Control keys and press the Power button that is on the keyboard).

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Polaroid Digital Products Service BULLETIN KB#990409105547GD

201 Burlington Rd. Bedford MA 01730

SprintScan Vol. 3, No. 5

From: New Products Service Support Group
Date: April 9, 1999
Subject: **Blue G3 Macintosh SCSI Host Adapters**

- **Category: EI Service Bulletin**
  The purpose of this bulletin is to provide Telephone and Repair Service organizations information regarding known compatible SCSI host adapters for use the new blue G3 Macintosh computers.

- **Products Affected:**
  SprintScan Models: 35ES, 35 Plus, 35LE, 45, 4000

- **Details:**

  Some models of the new Blue G3 Macintosh computers released in January of 1999 do not include built-in SCSI. Testing has shown that the following two SCSI host adapters are compatible with SprintScans and the blue G3.

  - Adaptec model 2906
  - Power Domain (made by Adaptec) model 2930U

  The two host adapters were tested under the following conditions:
  Computer: Blue 400 MHz G3 Macintosh with built-in Ultra-Wide SCSI host adapter.
  Software: PolaColor Insight versions 2.2 and 3.0
  Scanners tested: SprintScan: 35ES, 35 Plus, 35LE
  SprintScan 4000
  SprintScan 45 (with Insight 3.0, only)

  Adaptec 2906 Notes
  The 2906 is a host adapter that can also be used on Windows PC's. The product packaging includes software and instructions for use on both Macintosh and Windows computers. To get the board to work correctly with the Mac you must install an extension named "Adaptec SCSI Card 2906 driver." that's on the Macintosh Software CD-ROM included with the host adapter. Make sure the user has copied the 2906 extension in the Extensions folder that's inside the System folder. After the extension is loaded the Mac must be restarted. Although the Mac software CD-ROM contains a Power Domain control utility that allows the user to configure terminations options no changes are needed for the host adapter to work with SprintScans.

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Adaptec 2930U Notes

Testing has shown that the 2930U a plug and play host adapter when used with a SprintScan. No software needs to be loaded on a Macintosh G3 for proper operation with SprintScans.

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Polaroid Digital Products Service BULLETIN KB#990526053947GD

201 Burlington Rd. Bedford MA 01730

SprintScan Vol. 3, No. 6

From: New Products Service Support Group
Date: May 26, 1999
Subject: **SprintScan 4000 – Case Opening Tool**

- **Category: EI Service Bulletin**
  The purpose of this bulletin is to provide Repair Service organizations information regarding the availability of a special tool to remove the cover of the SprintScan 4000.

- **Products Affected:**
  SprintScan 4000

- **Details:**

  A special tool is now available that is made specially to open the case of the SprintScan 4000 without risk of damaging the cover tabs. To begin opening the case, the tool is pushed into one of the four slots on the bottom of the scanner. In one motion, the cover tab is unlatched and the cover is pushed up and away from the base. The tool is pushed into the four slots, one at a time, until all tabs are released.

  Tool Name: **SS4000 Case Tool**
  Tool Part Number: **CPS 541**

  Purchase from:

  Polaroid Corporation
  Material Services
  201 Burlington Rd
  Bedford, MA 01730
  Telephone: **800-343-4846 or, (781) 386-5649**
  Fax: **(781) 386-5606**
  e-mail: Parts-Department@Polaroid.com

Contact: Gerald DiBello
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Polaroid Digital Products Service BULLETIN KB#990604112200GD

201 Burlington Rd. Bedford MA 01730

SprintScan Vol. 3, No. 7

From: New Products Service Support Group
Date: June 4, 1999
Subject: **SprintScan 4000 Door Open Errors seen when using Version 3.0 or 3.1 of PolaColor Insight**

- **Category: EI Service Bulletin**

  The purpose of this bulletin is to provide Telephone Support Service organizations with information regarding certain customer reported error messages. The error messages are seen when using PolaColor Insight version 3.0 or 3.1 on a Macintosh or Windows PC.

- **Products Affected:**

  SprintScan 4000

- **Details:**

  The user has version 3.0 or 3.1 of PolaColor Insight installed in their computer.
  Macintosh OS.
  1. User reports seeing Error 1003 when they launch PolaColor Insight
  2. User reports seeing Error 17899 when they click on the **Preview** button

  Windows 95/98 or NT 4
  User reports seeing the following error when they click on the **Preview** button - Firmware Error: Unknown Sense Code. Please Call Polaroid Customer Support for Assistance.

- **Resolution:**

  One possible cause for the error codes listed above is that the scanner door is not closed. If the customer reports seeing the error codes listed in “Details”, it is possible that the scanner door is not locked in the “up” position. The scanner door must be closed before the scanner will operate.
  Note: Mac OS error 1003 is a scanner not recognized error. If the door is closed and error 1003 is still seen, check for SCSI card problems, cabling problems, scanner malfunctions (example: status lamps not on steady) and SCSI ID conflicts with other devices.

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Polaroid Digital Products

Service BULLETIN KB#990623150908GD

201 Burlington Rd. Bedford MA 01730

SprintScan Vol. 3, No. 8

From: New Products Service Support Group
Date: June 23, 1999
Subject: **SprintScan 4000 CCD Cable Detaches**

- **Category: Product Alert Bulletin**

  The purpose of this bulletin is to provide Telephone Support Service and Repair organizations with information regarding a possible hardware problem affecting the SprintScan 4000.

- **Products Affected:**

  SprintScan 4000

- **Details:**

  The user reports the results of a Preview scan using PolaColor Insight:
  - When a positive film type is selected, they see an all black preview image
  - When a negative film type is selected, they see an all white preview image

  User also notes that the preview scan time is much longer (compared to when the scanner was working normally).

- **Resolution:**

  Required Tools & Equipment

  - RTV Silicon Sealant
  - Cotton Tipped Applicators (see Figure 4)
  - Long tipped needle-nose pliers
  - Cover Removal Tool part number: Polaroid P/N CPS 541

  Problem: The CCD cable connecting the main logic board to the CCD board has come off one of its mating connectors. The cable may detach at either end but, in most cases, detaches from the CCD board connector.

  This defect applies to all SprintScan 4000's. The manufacturer is working on a solution to the problem. When the manufacturer implements a solution, a Bulletin will be issued to notify the field.

  NOTE: This Bulletin only suggests a method to fix the cable detaching defect. It is also suggested that the fix be applied to all units returned for service even if the cable has not detached. Local repair policy for the SprintScan 4000 should be consulted before implementing the fix suggested in this bulletin.

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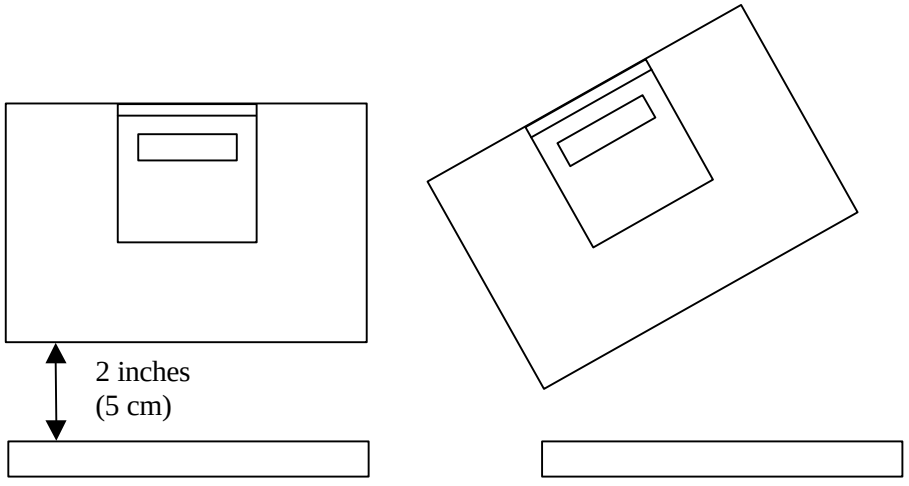
The following suggested repair method has been approved by the manufacturer of the scanner:

1) Lift the scanner cover using the special tool P/N CPS 541, (see SprintScan Service Bulletin V2, N6 dated May 26, 1999) or some other suitable method.
2) Remove the two door switch cable connectors and the power switch cable connector from their mating connectors on the front of the main logic board (see Figure 1). In most units, a wire retainer at the top left of the main logic board retains the power switch assy. wires. Release the retainer so the all five power switch assy wires are free (see Figure 2).

Caution: The wires connecting to the door switches are very short and can easily detach from the door switch LED's. To remove the cover without damaging the wiring -: First, gently pull up the cover from the base and tilt it to the left side of the scanner (approx. 45 degrees). Second, while the cover is tilted, detach the three connectors from the main logic board before lifting off the cover.

3) Reconnect the CCD cable. If the cable has detached from the back of the CCD board take care not to move the position of the CCD board when reattaching the cable. Do not loosen the two screws that fix the board assembly to the scanner chassis.
   Needle nose pliers appear to be the most effective tool for this operation.
4) Apply RTV (also called silicone sealer) using a cotton tipped applicator (see Figure 4) to fix the CCD cable connector to the header on the CCD board (see Figure 3). Coat both the top and bottom sides of the connectors with the sealant material.
5) Repeat the procedure on the CCD cable connector end that connects to the Main Circuit board. Coat both sides of this connector.
6) Reassemble the scanner and test its operation.



Step 1 – Lift Cover

Step 2 – Tilt cover to left side

Figure 1 – Removing the Scanner Cover

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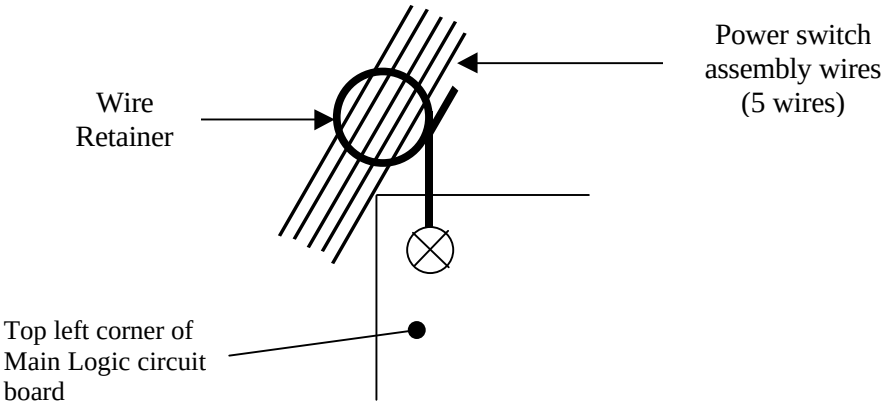

Figure 2 – Wire Retainer Detail

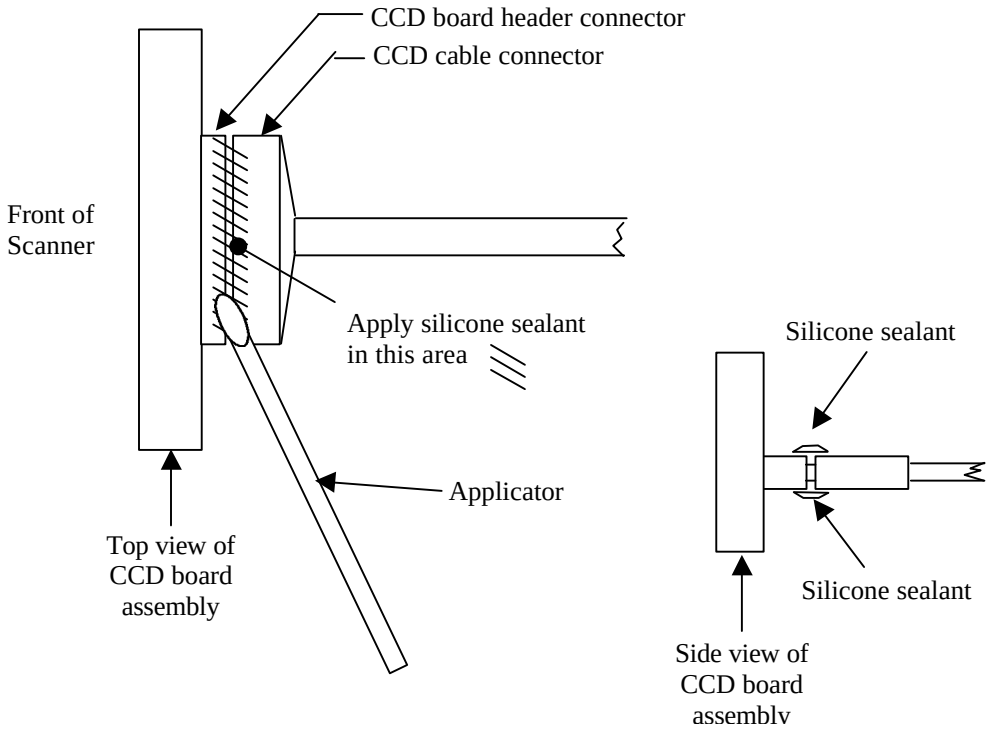

Figure 3 – Applying Silicone Sealer

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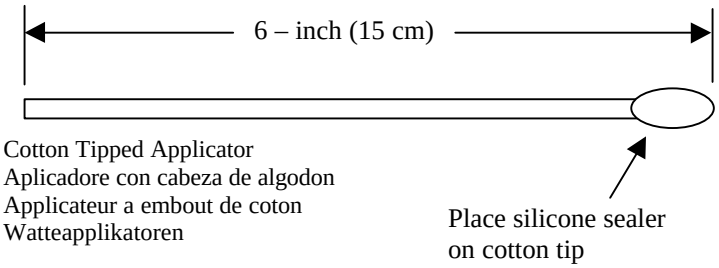

Figure 4 – Cotton Tipped Applicator

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Polaroid Digital Products Service BULLETIN

KB# 990702104629GD

201 Burlington Rd. Bedford MA 017030

SprintScan Vol. 3, No. 9

From: New Products Service Support Group
Date: July 2, 1999
Subject: **New SCSI Host Adapter bundled with Sprintscans in US**

- **Category: EI Service Bulletin**
  The purpose of this message is to alert service and telephone support providers regarding a *new* SCSI Host adapter board that will be included with new SprintScans sold for use with a Windows based PC in some regions.

- **Products Affected:**
  SprintScan 4000, SprintScan 35 Plus, SprintScan 35LE

- **Details:**

  Notes

  As of July 1999 (approximate date), a new PCI Plug and Play SCSI host adapter is included with Sprintscan for Windows based PC's in the US and may be an option in other regions. The 3922 replaces the Advansys ABP922 host adapter that was formerly included. This bulletin replaces SprintScan Bulletin V2, N9 dated October 12, 1998 which can be discarded.

  Product Summary

  Manufacturer: Advansys (www.advansys.com)
  Model Number: ABP-3922
  PID Number: 101523
  Computer Bus: PCI (Plug and Play)
  SCSI Connector: 25 Pin type D
  Device Protocol: SCSI-1, SCSI-2 and Fast SCSI-2
  Interface Protocal: Bus Master DMA
  Bootable: Yes
  Device Support: Up to 7 SCSI devices
  SCSI Transfer Rate: Up to 10MB/Sec
  Win 95/98 Miniport Driver: ASC.mpd
  Win NT 4 Miniport Driver: ASC.sys
  Product Summary: Multi-tasking, multithreaded I/O, disconnect/reconnect, synchronous and asynchronous data transfer, ASPI compliant
  OS Support: Macintosh**, Windows 95 and 98, Windows NT4
  Electrical Termination: Single-ended Active

  ** Not tested for compatibility with Sprintscans

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Package Contents

1) 3922 Host Adapter
2) *Advansys Super SCSI* on CD-ROM with the following features:
   - Allow the user to directly connect to the Advansys website to download updated drivers
   - Do SCSI bus troubleshooting
   - View SCSI bus
   - Install drivers for the Advansys 3922 board
   - SuperView allows the user to see SCSI devices that are on the bus.
   - Includes ASPI for Windows NT4
3) Printed installation instructions for Windows 95/98, Windows NT4 and Macintosh

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Polaroid Digital Products Service BULLETIN KB#990415172632GD

201 Burlington Rd. Bedford MA 01730

PolaColor Insight Vol. 2, No. 1

From: New Products Service Support Group
Date: April 14, 1999
Subject: **PolaColor Insight version 3.x for the PC – Error message seen when user tries to Open the application**

- **Category: EI Service Bulletin**
  The purpose of this bulletin is to provide Telephone Support organizations with information on how to correct a PolaColor Insight version 3 installation problem.

- **Products Affected:**
  SprintScan Models: 35ES, 35 Plus, 35LE, 45, 4000 used with a PC

- **Details:**

  Customer has installed PolaColor Insight version 3.X on their PC and previously had version 2 installed. When they open the application, the following error message appears:

  IQA error: Unable to initiate the image processing library

- **Resolution:**

  The error will only occur when the user uninstalls version 2 of PolaColor Insight before installing version 3. After Insight 2 is uninstalled, the file named *Pltbxc.dll* is not removed. Pltbxc.dll is a file associated with IQA. If this file is left behind when Insight 2 was uninstalled, the IQA files from Insight 3 are not installed and the error message “IQA error: Unable to initiate the image processing library” is seen.

  To correct the problem, delete the file “Pltbxc.dll” that is in the C:/WINDOWS directory. After the file is deleted, re-install PolaColor Insight version 3.

  When version 3 of Insight is installed without uninstalling version 2, the problem will not be seen. This is the preferred method for installing Insight 3.

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Polaroid Digital Products

Service BULLETIN KB#990526115010GD

201 Burlington Rd. Bedford MA 01730

PolaColor Insight Vol. 2, No. 2

From: New Products Service Support Group
Date: May 17, 1999
Subject: **Color Matching Tips for Insight v3 (or later) and Photoshop 5.x**

Products Affected:

SprintScan Models: 4000, 35ES, 35 Plus, 35LE, 45

Problem:

You are using Photoshop version 5.x on a Macintosh or Windows PC. Your scans and prints have color casts that are not seen on the original scanned image. It's a good possibility that your are not following the Adobe recommended color management procedures required for Photoshop 5.x

Solution:

Photoshop 5 Color Management – Brief Summary

A scanner interprets an image as certain RGB values according to the scanner's particular specifications and light sensitivity. A given monitor displays RGB colors according to the specifications of its CRT phosphors; a color inkjet printer outputs in RGB according to its own specifications. The open color management system used in Photoshop 5.x lets you automatically compensate for the differences in devices by translating the different RGB color spaces for you. By using device profiles and a specified color space in Photoshop 5.x, the compensation feature allows the color information to be used through your input-output workflow in a device-independent manner with more color accuracy. For the compensation feature to work properly, there are some initial setup steps required:

1. Calibrate your monitor and create a monitor profile. Use Photoshop's built-in Adobe Gamma control panel utility or a third–party product.
2. Setting up files for proper conversion of your SprintScan scanned images to Photoshop 5.x.
3. Setting up Color Settings preferences in Photoshop 5.x
4. Converting SprintScan scanned images to Photoshop 5.x color space before making any additional corrections.
5. How to print to an Epson inkjet using color management profiles.

The five setup procedures suggested here are for a quick setup of the Color Management system. The quick setup procedure assumes that the SprintScan is not the only input device. When a scanned image is opened in Photoshop you will see a dialog box asking what profile you want to apply to the image (see Step 4). Customers wanting to learn more about the subject of Color Management should consult the Photoshop User Guide. They can also get an

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Acrobat document named “Adobe Photoshop 5.0 Color Management” at the following web address: http://www.adobe.com/supportservice/custsupport/TECHGUIDE/PSHOP/main.html

Setting up Color Management

1. Calibrate your Monitor

Calibrate your monitor using one of the following methods:

a) Use the Adobe Gamma control panel utility to create a monitor profile. The profile is automatically stored in the ColorSync folder on a Macintosh or the Color folder on a PC.
b) Use a third - party calibration utility and an ICM 2.0 or ColorSync compatible ICC profile generator.

2. Setting up files for proper conversion of your SprintScan scanned images to Photoshop 5.x.

Macintosh

a) Open the System Folder so that it’s window is on the left side of the monitor screen. Re-position the window if necessary.
b) Open the Preferences folder so that its window opens on the right hand side of the screen. Re-position the window if necessary so it does not cover the System folder window.
c) Locate the ColorSync Folder inside the System Folder.
   - Macintosh System 8.5 or later: The ColorSync Folder is in the System Folder
   - Earlier Mac Systems: The ColorSync folder is in the Preferences Folder. Scroll through the Preferences folder until you find the ColorSync folder and double-click to open it so it is open on top of the previously opened System Folder.
d) Again, scroll through the Preferences folder contents and find the folder named Polaroid IQA Profiles. Look in the folder and scroll through its contents and find the profile named “Monitor, PC generic 1.8 gam.icc”.
e) Place the cursor over the profile and, while holding down the Option key (notice that a “+” sign appears to the right of the cursor) drag a copy of the file into the ColorSync folder. This action will place a copy of the monitor profile, with the name unchanged, in the ColorSync folder.
f) Close all open windows

Windows 95/98

a) Open an Explorer window on the Desktop.
b) Use the Explorer to open the Polaroid Profiles folder in the following path: C:\Program Files \Common Files \Polaroid Imaging \Profiles
c) Open the Profiles folder so its contents appear in the right hand side of the window. Scroll down to find the profile named “Monitor, PC generic 1.8 gam.icc”
d) Open a second Explorer window on the Desktop so that both windows are visible and they do not overlap each other. Find the Color Folder in the following path: C:\Windows\System\Color. Open the Color folder so its contents appear in the right hand pane of the open window.
e) Point to the icon for the H Monitor, PC generic 1.8 gam.icc profile and hold down the “Ctrl” key (notice that a “+” sign appears to the right of the cursor). Drag the copy to the Color folder in the other open Explorer window. This action will place a copy of the monitor profile, with the name unchanged, in the Color folder.
f) Close both Explorer windows.

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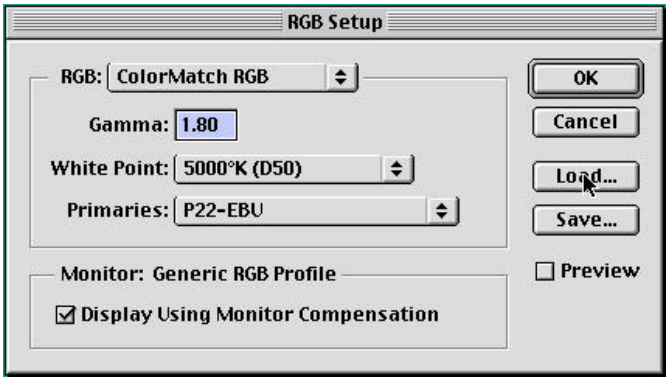
Windows NT4

a) Open an Explorer window on the Desktop.
b) Use the Explorer to open the Polaroid Profiles folder in the following path: C:\Program Files \Common Files \Polaroid Imaging \Profiles
c) Open the Profiles folder so its contents appear in the right hand side of the window. Scroll down to find the profile named “Monitor, PC generic 1.8 gam.icc”
d) Open a second Explorer window on the Desktop so that both windows are visible and they do not overlap each other. Find the Color Folder in the following path: C:\WINNT\SYSTEM32\Color. Open the Color folder so its contents appear in the right hand pane of the open window.
e) Point to the icon for the H Monitor, PC generic 1.8 gam.icc profile and hold down the “Ctrl” key (notice that a “+” sign appears to the right of the cursor). Drag the copy to the Color folder in the other open Explorer window. This action will place a copy of the monitor profile, with the name unchanged, in the Color folder.
f) Close both Explorer windows.

3. Setting up Preferences in Photoshop (Macintosh, Windows 95/98 & NT 4)

A. Choosing a Monitor Profile

1) Open Photoshop
2) Choose from the File menu; Color Settings>RGB Setup… (see illustration)



3) Make the following choices in the RGB Setup dialog box:
   - Select the “Colormatch RGB” choice from the dropdown menu.

   Note: 1.80 Gamma, White Point and Primaries will automatically fill–in when ColorMatch RGB is chosen.
   - Check the box “Display Using Monitor Compensation”
4) Click on the OK button and close the RGB Setup window.

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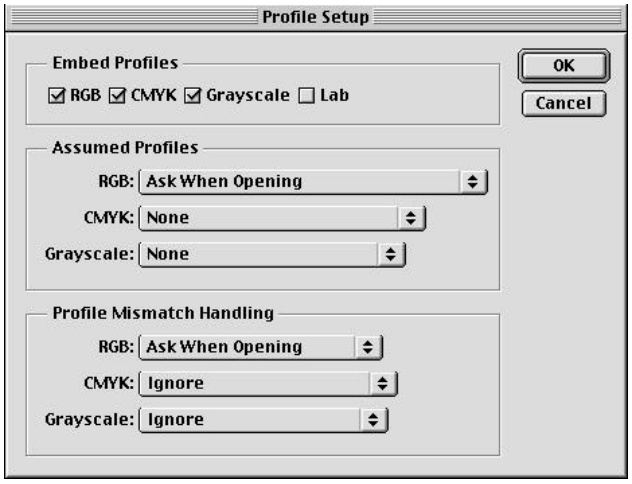
B. Profile Setup (Macintosh, Windows 95/98 & NT 4)

1) Choose from the File menu; Color Settings/Profile Setup… (see illustration)



2) Make the following choices in the "Profile Setup" dialog box:
   In the Embed Profiles section; check - RGB, CMYK, and Grayscale
   Under Assumed Profiles, RGB: choose "Ask When Opening" from the dropdown menu.
   Under Profile Mismatch Handling, RGB: choose "Ask When Opening"
3) Click on the OK button and close the Profile Setup dialog box. **Note:** You must shut down and re start your computer for these changes to take effect.

4. Converting SprintScan scans to Photoshop 5.x color space before making any additional corrections. (Macintosh, Windows 95/98 & NT 4

a) Open the PolaColor Insight application On the Preview tab in the Profiles section, under Display; choose - "Monitor, calibrated to 1.8 gamma" from the dropdown menu choices.
b) Preview and scan an image.
c) Open the saved image in Photoshop. Notice that when you open the color-matched image you just scanned, the Missing Profile dialog box appears (see illustration).

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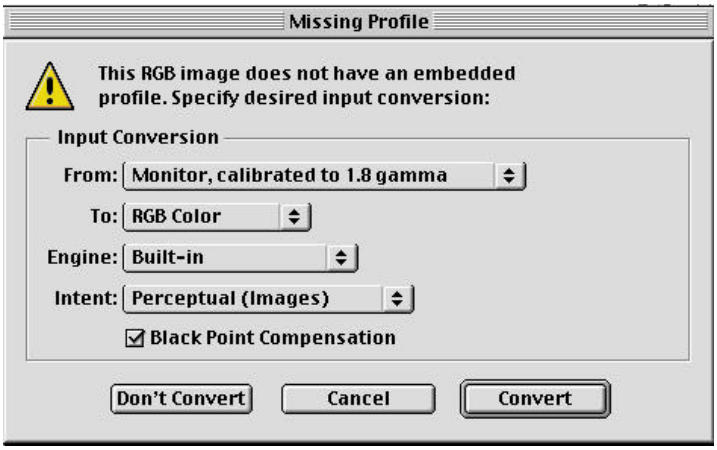
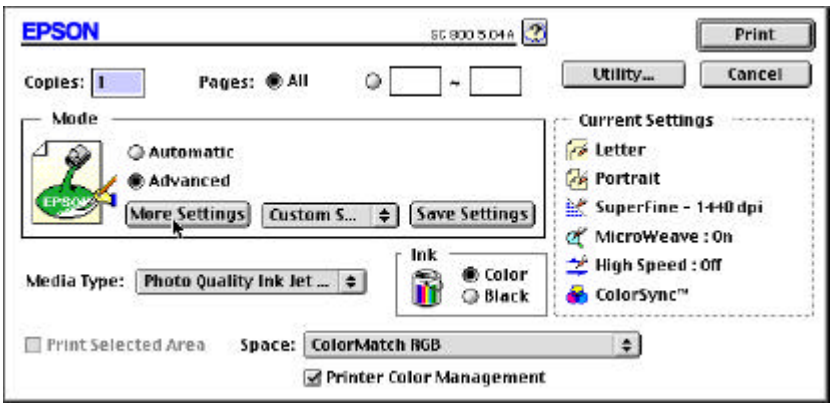


d) Make sure the Input Conversion choices are as shown in the illustration.
From: Monitor, calibrated to 1.8 gamma
To: RGB Color
Engine: Built-in
Intent: Perceptual (Images)
Black Point Compensation; - checked

5. Printing using color management profiles with Epson Inkjet 800

Following are some suggestions for setting up an Epson Stylus Color 800 Printer to print accurate images that were scanned using PolaColor Insight. The Macintosh version of the printer driver dialog boxes is shown in the illustrations, Windows dialog boxes are similar.

a) The best quality results are obtained by using glossy inkjet photographic paper. Make sure that the printer is set correctly for the paper that's used.
b) For "Space" choose Colormatch RGB from the dropdown menu.
c) Access the Main printer settings dialog box and click Advanced; then More Settings (See illustration).



d) In the More Settings dialog box select: (see illustration).

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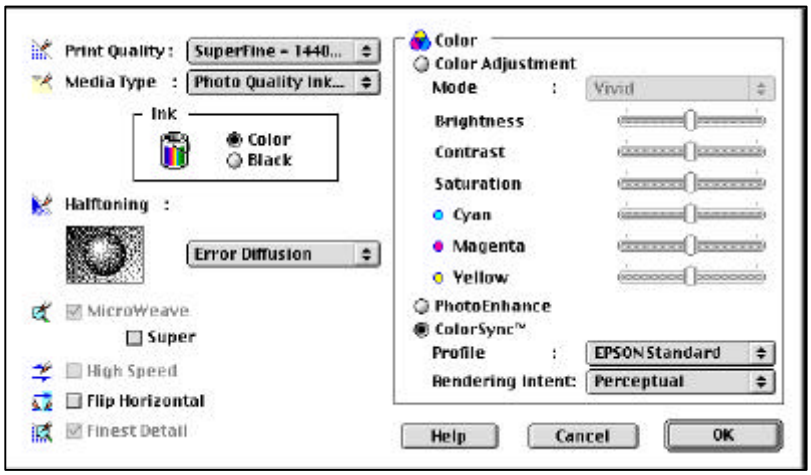

- "Superfine 1440 dpi: for Print Quality
- "Error Diffusion" for Halftoning
- "Epson Standard" for ColorSync Profile
- "Perceptual" for Rendering

e) Close the dialog boxes and print the image.

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Polaroid Digital Products Service BULLETIN KB#990630113234GD

201 Burlington Rd. Bedford MA 01730

PolaColor Insight Vol. 2, No. 4

From: New Products Service Support Group
Date: June 28, 1999
Subject: **PolaColor Insight Pro version 3.5 Released**

Category: Software Info Bulletin

The purpose of this bulletin is to provide Telephone Support and Repair organizations with information on the new features of PolaColor Insight version 3.5

Products Affected:

SprintScan Models: 4000, 35ES, 35 Plus, 35LE, 45

Details:

PolaColor Insight Pro version 3.5 has been released as of the date of this Bulletin. The new software has the following improvements and changes (compared to version 3.1)

New Feature Summary

- Scratch disk selection (Macintosh only)
- 12-bit-per-channel (36-bit) raw image file format
- Autofocus control
- Profile embedding

Software Availability: English version available on Polaroid website at:
http://www.polaroid.com/service/sfwdownload/index.html
The version 3.5 software on CD-ROM is scheduled to be available July 1999.

- English version including Adobe PhotoDeluxe 2.0 – PID No. 103224
- Five language version without PhotoDeluxe – PID No. 103242

New Feature Listing

Macintosh Version

New! Scratch Disk Selection

Description: During image processing on Macintosh computers, PolaColor Insight software stores temporary files on the hard disk. The disk used for these files is called the “scratch” disk. If necessary, you can select a different drive for use as a scratch disk with these steps:

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1 Click Preferences on the Edit menu.
2 Click the Scratch Disk popup and select a disk drive.
3 Click OK.

New! Settings File Converter
Description: Allows settings files that were created in earlier versions of PolaColor Insight to be recognized and used by version 3.5

Macintosh and Windows

New! 12-bit-per-channel (36-bit) raw image file format

Description: PolaColor Insight Version 3.5 allows images to be saved in a 12-bit-per-channel format intended for highly sophisticated image processing with other applications or for scientific and analytical uses. These 12-bit-per-channel image files contain the raw image data directly from the scanner without any PolaColor Insight image corrections applied.

To save an image in this format, follow the PolaColor Insight instructions to preview and scan an image. (Any corrections you make will be ignored.) When the Save Image File As dialog box appears, make sure Scan 12 Bits per Channel is enabled (checked).

This feature is available only when saving as TIFF or Photoshop 3.0 images on Macintosh systems or as TIFF images on PC systems.

New Autofocus control

To reduce the time required for a scan, the scanner automatic focus function is normally disabled. For most scans at normal sizes and resolutions, disabling autofocus does not degrade the image. When scanning small areas at high resolutions, however, enabling autofocus may improve image sharpness.
To enable or disable autofocus during the final scan:

1 Click Preferences on the Edit menu.
2 Click the Scanning tab (PC systems only).
3 Click Enable Autofocus on Final Scan to display or remove the checkmark.
4 Click OK.

New! Profile embedding

PolaColor Insight version 3.5 software lets you embed color pro-file information within image files. The result is more accurate color rendition when you view or print these files with Adobe Photoshop software (version 5 or later) or other applications compatible with the ColorSync color management system or conforming to ICM standards. This system uses the color profile information to compensateautomatically for color space differencesamong scanners, monitors, printers and other devices.

Refer to PolaColor Insight Bulletin V3, N2 dated May 17, 1999 for full details on color matching and profile embedding.

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Polaroid Digital Products
Service BULLETIN KB990716134701GD
201 Burlington Rd. Bedford MA 01730
PolaColor Insight Vol. 2, No. 5

From: New Products Service Support Group
Date: July 16, 1999
Subject: **PolaColor Insight Scripting for Macintosh – Some Scripts Don't Seem To Work**

Category: Product Alert Bulletin

The purpose of this bulletin is to provide Polaroid Telephone Support providers with information concerning problems with sample Applescripts provided with the current Macintosh version of PolaColor Insight. The samples are included with the PolaColor Insight version 3.5 that was released June 1999 on Polaroid's website (www.polaroid.com).

Products Affected:

SprintScan Models: 4000, 35ES, 35 Plus, 35LE, 45

Details:

Introduction

PolaColor Insight version 3.5 for the Macintosh was released on Polaroid's website on June 23, 1999. The release version contains a number of sample programs written in Applescript (A scripting tool provided with the Mac OS) and intended to provide the user with the tools to automate the scanning process in PolaColor Insight. The sample scripts provided are intended to give the user a starting place to customize the provided scripts for their own needs and/or help them to learn scripting.

For example, one script provided is named "Run Batch Folder." This script will scan a number of slides or filmstrips based on preset parameters (i.e. pre-prepared Insight settings files) and stop when it runs out of settings files. This particular script was originally developed to automatically scan all four slides in a SprintScan 45 4-slide filmholder. Since each slide is in a different location within the holder, the four settings files provide, among other parameters, a crop rectangle for the location of each slide. If a user wanted to modify the script to work with a SpintScan 4000 they would have to add a frame counter position to script.

Problem: User can't modify three of the sample scripts

If the user is learning Applescripting and wants to modify one of the sample scripts for their own use, they can do so using the Applescript scripting editor that's included free with the Mac OS. To edit a script using the scripting editor

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you would normally choose a sample script, double-click on the script icon and this opens the script for editing. The following three sample scripts contain references that Applescript can't find and it appears to the user that the script will not run and can't be edited:

1. Run Batch Folder
2. SS 4000 Batch w/Notify
3. Run Multiple Scans (sample)

Getting Applescript help

Two new sources for Applescript learning tools are:

1. Your HD: Apple Extras: AppleScript: About Applescript 1.3.6 (version number varies depending on what you've installed on your Mac). This document gives a very brief intro to Applescript.
2. Apple's Help Center found on the users hard drive, and http://www.apple.com/applescript.

Resolution:

Following are workaround suggestions that will give users a way to edit the three sample scripts that, to the user, appear to be non-functional. All the other sample scripts included with Insight 3.5 may be edited without the need for workarounds. The English only version of PolaColor Insight 3.5 for the Macintosh that's currently (as of the date of this bulletin) found on Polaroid's website will be modified. After modification, all three sample scripts that currently have problems will be fixed. The localized five-language version of PolaColor Insight version 3.5 will have the corrected scripts inserted before it's released (scheduled release – month the of July 99).

1. Run Batch Folder script
   When the user attempts to run or edit the script they see a Dialog box similar to the one shown in Figure 1. The message indicates that the script editor is looking for an application name "Blink Debug" that's referred to in the script.

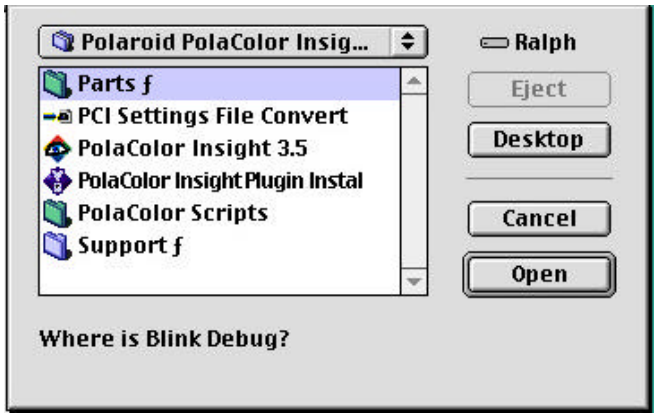

Figure 1

A workaround allowing script to be edited is - Point Applescript to the PolaColor Insight 3.5 application. To do this you would click the mouse pointer to select

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PolaColor Insight 3.5 in the list and then click on the Open button. After this action is taken, Applescript opens up the script for editing. After edits are complete you can save the script with a different name.

2. SS4000 Batch w/Notify script

When the user tries to run or edit this sample script, Applescript comes up with a Dialog box similar to the one shown in Figure 1. In this case, the message seen is: Where is SendNotification? SendNotification is a reference to a third-party application that sends an e-mail notification to a chosen person when a batch scan is complete (this is explained within the script). Since the application SendNotification is not found, Applescript posts a Dialog box asking where to find it. A workaround, allowing the user to edit the script is to choose any application on the users hard drive. After the application is chosen, the name of the application will be inserted within the script and the user will then be able to open the script for editing. When editing, the reference to the SendNotification application can be removed and the script can be saved with a different name chosen by the user.

3. Run Multiple Scan (sample) script

If the user tries to run or edit this script they will see the same Dialog box as shown in Figure 1 asking: “Where is Blink Debug?” The workaround to allow this script to be edited is the same as the one for the Run Batch Folder script.

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Polaroid Digital Products Service BULLETIN

KB# GD990217143741

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot Printer - (General) Vol. 1, No. 1

From: New Products Service Support Group
Date: February 16, 1999
Subject: **Software Update**

- **Category: Software Info Bulletin**
  The purpose of this message is to notify Telephone Service and Repair providers of ColorShot printer software updates now available to customers via the world wide web.

- **Products Affected:**
  Polaroid ColorShot Parallel printer, PhotoMAX Photo Printer & ColorShot USB printer

- **Details:**

1. Summary of new software available at: www.colorshot.com:

- New! Internet Explorer and Netscape Navigator plug-in (Beta version)

A printer plug-in is now available for Internet Explorer version 4 and Netscape Navigator version 4, or later. The plug-in allows a user to choose and print many types of images found on the world wide web directly to ColorShot or PhotoMAX printers.

- Update! **USB** version 1.1 software released
  Summary of changes:
  - Automatic image sharpening when IQA is turned on.
  - New color profiles
  - New sample images
  - IQA upgraded to version 1.94 for improved color performance
  - Software now refers to the printer as “Polaroid Digital Photo Printer – USB”

2. How to install the new USB version 1.1 software for Windows™ 95 or 98
NOTE: The new software is a large file. Telephone modem users should expect lengthy download times.

a) Go to the Printers folder and delete the ColorShot USB entry.
b) Go to Add-Remove Programs in the Control Panels folder and delete the entry; “Polaroid IQA for PhotoPrinter.”
c) Re-boot the PC
d) Install the new version 1.1 software

- Continued on next page -

Polaroid’s Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

3. Notes on the new test images included with USB software version 1.1
After the new software is installed, the Samples folder placed on the user's C drive now contains new sample images. These images are intended for use by the customer to help test the operation of the printer. The images look best when printed with IQA turned "on."

a) "Fish" is an image that should be printed in Landscape mode.
b) "Flowers" is an image that should be printed in Portrait mode.

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Polaroid Digital Products Service BULLETIN

KB# 981121135007GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot USB Vol. 1, No. 7

From: New Products Service Support Group
Date: November 24, 1998
Subject: **IQA Version Conflict with PolaColor Insight v 2.X**

- **Category: Software Info Bulletin**

  The purpose of this message is to alert Telephone Service and Repair providers about a software conflict with PolaColor Insight version 2.X. The conflict will only occur if the user has version 1.03, or earlier, of the USB software. It's expected that this problem will mostly be seen by Polaroid Sales and Service personnel.

- **Products Affected:**

  Polaroid ColorShot USB printers operating with version 1.01, 1.02, or 1.03 (or earlier Beta versions) of the software running under the Windows 95 or Windows 98 OS.

- **Details:**

  The user has any version, prior to 1.1, of the ColorShot USB software installed and working normally. After PolaColor Insight Version 2.X is installed, an error is reported when the user tries to print using the ColorShot. The error message reads: "Polaroid ColorShot internal software error." The error occurs after the Preview window comes up and you click the printer icon at the top. The same error will also occur when the user tries to print without using the Preview feature.

- **Resolution:**

  You can find out what version of software is installed on a user's PC with one of the following methods:

  1. Look at the version number printed on the ColorShot CD-ROM
  2. Open the Printers folder and select the ColorShot USB printer icon. Right-click on the icon and choose Properties. Choose the Graphics tab in the Properties window that opens. Click on the About button and the window that appears will show the version number.

  The problem happens because PolaColor Insight version 2.X contains a newer version of IQA than the one installed by the ColorShot Software. This problem will not occur if the user has version 1.X, or later, of the software. Use the following steps to fix this problem:

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

1. Disconnect the USB cable from the back of the ColorShot Printer.
2. Delete PolaColor Insight using the Add/Remove programs function.
3. Delete ColorShot IQA using the Add/Remove programs function.
4. Delete the ColorShot USB printer that's inside the Printers folder by Right-Clicking on its icon and choosing Delete.
5. Delete the entire folder named "Polaroid Imaging" that can be found in the path: C:\Program Files\Common Files\Polaroid Imaging
6. Find the file "Pltbxc.dll" and delete it.
7. Re-start the PC.
8. Install PolaColor Insight
9. Install the ColorShot USB software
10. Re-start the PC.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Polaroid Digital Products Service BULLETIN KB#981218180133GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot Parallel Vol. 1, No. 3

From: New Products Service Support Group
Date: December 18, 1998
Subject: **Software Version 1.1 Released**

- **Category: Software Info Bulletin**
  The purpose of this message is to alert Telephone Service and Repair providers regarding the latest release of software for the Parallel version of the ColorShot Digital Photo Printer

- **Products Affected:**
  Polaroid ColorShot Parallel digital photo printer

- **Details:**

1. New Features & Benefits

Software Version 1.1 (PID #629403) has been released for the ColorShot Parallel printer. This software replaces the previously released version 1.0. The new software has the following new features:

- Updated printer profiles – Provides improved highlight detail and color performance.
- New sharpening feature – This feature greatly enhances image quality. **Note:** the sharpening feature is only active when IQA is "on."
- Lpt.vxd version 4.00.953 driver file included on CD-ROM. This will be a help to the user who does not have web access, or any other way to get this updated driver.
- New test images – Test images have changed since version 1.0.

2. Installing the New Version 1.1 Software

a) Go to the Printers folder and delete the ColorShot Parallel.
b) Go to Add-Remove Programs in the Control Panels folder and delete the entry; "Polaroid IQA for PhotoPrinter."
c) If you are installing the printer on a Compaq Deskpro PC (Note: this does not apply to Deskpro model EN) you may need to install a new version of the file Lpt.vxd. See **3.** Installing a new Lpt.vxd file.
d) Re-boot the PC
e) Install the new version 1.1 software

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3. Installing a New Lpt.vxd file

If the customer is experiencing slow printing (takes 5 minutes or more to print a picture), or have a Compaq Deskpro PC they may have an old version of the Lpt.vxd driver on their PC.

a) To check what version is currently installed, you can find the Lpt.vxd file in the following path: C:\Windows\System (assuming C is the letter of their root drive).
b) Right click on the file name and choose Properties. In the Properties window that appears, choose the Version tab. Read the version number.
c) If the version number is earlier than 4.00.953 you should replace it with the newer version.
d) Ask the customer to make a copy of the existing Lpt.vxd file in case something happens to the new version file. By making a copy, you can always go back to the old file if it's needed.
e) Use the Explorer to search for the Utility folder on the ColorShot CD-ROM. Find the file named UpgradeLPTdriver.exe. Double-click on this file to launch it. It will unpack the new Lpt.vxd file to a location you choose (default location is: Windows\Temp).
f) Copy the new Lpt.vxd file to: C:\Windows\System
g) Restart the PC and try printing again.

4. New Test Images

The Samples folder on the ColorShot CD-ROM contains two new sample images. These images are intended for use by the customer to help test the operation of the printer. These images look best when printed with IQA turned "on."

a) "Fish" is an image that should be printed in Landscape mode.
b) "Flowers" is an image that should be printed in Portrait mode.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD Internet: dibellg@polaroid.com

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Polaroid Digital Products Service BULLETIN

KB# 990216134044GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot Parallel Vol. 2, No. 1

From: New Products Service Support Group
Date: February 15, 1999
Subject: **Firmware Defect**

- **Category: Service Alert Bulletin**
  The purpose of this message is to notify Telephone Service and Repair providers of a firmware defect that affects the ColorShot Digital Photo Printer – Parallel model. Note: USB models are NOT affected because they contain different firmware.

- **Products Affected:**
  Polaroid ColorShot Parallel printer & PhotoMAX Photo Printer

- **Details:**
  Reported problem: A parallel printer is correctly installed and has been working normally. The customer reports that they are now seeing one of the following error messages:
    - Device Internal Problem
    - Printer Communication Problem

- **Resolution:**
  One source of the error messages is a fault in the printers' firmware code. Since there are other sources that can cause the error messages listed, above, there is a method you can use to determine if the firmware fault caused the error.

  Use the Explorer and look in the following path - C:\WINDOWS\TEMP for files named "SeqXXX.txt" (where XXX is a number beginning at 000). These are Sequence files created each time the printer is used. Scroll through the list and look for the two newest Sequence files created. The newest files are the ones that have the most recent date and time as listed in the "Modified" column of the Explorer window. Double-click on a Sequence file to open it with Notepad. Ask the user to quickly scan each of the two Sequence files and look for one, or both, of the following example messages:

  11:03:52.840: readModuleData "Error1 Code" (146)
  11:03:53.120: readModuleData "Error1 Code" (128)

  The first characters of the message are the time that the error occurred and can be ignored. The most important part of the information is the number seen within the parentheses.

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Note that the (146) and the (128) numbers are the unique identifiers of the firmware fault. If you see these numbers along with the “readModuleData” listing, then the firmware problem is the cause of the error message seen by the customer.

Solution: Clear the error condition by removing and replacing the pack of film that’s in the printer. After the film pack has been removed and replaced the customer can start printing again. If you only open and close the film loading drawer the problem will not be fixed, the film pack must be removed and put back in. Remember that the top piece of film will now be exposed and will be ejected before the next real print is ejected.

Important! If the numbers within the parentheses of the are NOT 128 or 146 (or the noted error message does not appear in the Sequence log), use information in the “ColorShot Telephone Support Guide” to help you find other causes of Internal Problem or Communication Problem error messages.

Contact: Gerald DiBello
e-mail: DIBELLO, GERALD
Internet: dibellg@polaroid.com

Polaroid’s Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Polaroid Digital Products Service BULLETIN KB#998618141449GD

201 Burlington Rd. Bedford MA 01730

Polaroid Photo Printer -Parallel Vol. 2, No. 2

From: New Products Service Support Group
Date: June 17, 1999
Subject: **New Software Version 1.2 Released**

- **Category: Software Info Bulletin**

  The purpose of this Bulletin is to notify Telephone Service and Repair Service providers of a new released version 1.2 of the [ColorShot] Photo Printer - Parallel Software.

- **Products Affected:**

  Polaroid ColorShot Photo Printer Parallel

- **Details:**

1. New Feature Listing (compared to version 1.1)

   New features in Version 1.2 of the Parallel Photo Printer software:

   - **A single page "Release Notes" document is included with the new software**. A copy of the release notes is attached to the last page this bulletin.

   - **LPT.vxd parallel port drive update for Windows 95 computers**

   The CD-ROM now contains a LPT.vxd parallel printer port driver updater in the "Utility" folder. If the user sees "Communication Error Occurred" messages or encounters slow printing (files takes 5 minutes or more to print) the LPT.vxd file should be updated. Instructions for updating the file are included in the Release Notes.

   - **English only Web browser printer plug-in (version 1.23) for Internet Explorer version 4 and Netscape version 4, or later.**

   A new feature is included with this version of the software. Users can now print images (note: some image types are not supported) directly from their web browser. Previously this software was only available on the Polaroid website. The Release Notes (a copy is on the last page of this Bulletin) include instructions on how to install the web plug-in software.

   Note: Version 1.23 is an update to a version 1.1 that, previously, was only available on the Colorshot.com website. See ColorShot Bulletin V1, N1 released in December 1998.

   - **JavaScript Engine update instructions for Internet Explorer version 4**

   The users of Windows 95 PC's may require a JavaScript Engine update. The update is needed if printing from the web does not work. The new Engine is available from Microsoft via the World Wide Web. Instructions on how to get and install the update are included in the Release Notes (a copy is on the last page of this Bulletin).

(new features continued on next page)

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- **English only Web Printer Plug-in On-line Help**

  You can learn how to use the web printer plug-in by going to the following web URL: www.polaroid.com/products/digitalphotoprinter/plugins/index.html

2. How to get the Software
   - CD-ROM: Order Parallel Photo Printer v1.2; Software PID No. is 629403
   - Web plug-in: www.Polaroid.com – go to ColorShot page
3. Installing new Version 1.2 software if an older version exists on the user's PC
   Note: Uninstalling old software is not mentioned in the Readme or Release notes
   a) Go to the Printers folder and delete the ColorShot Parallel or Photo Printer Parallel.
   b) Go to Add-Remove Programs in the Control Panels folder and delete the entry; "Polaroid IQA for PhotoPrinter."
   c) If the user had a older version of the web-browser plug-in, go to Add-Remove Programs and remove "Plug-in for Polaroid Photo Printer."
   d) Re-boot the PC
   e) Install the new software
4. Reprint of Readme file (this page) and printed Release Notes (page 3) that are included with version 1.2 of the Parallel Photo Printer software.

Photo Printer Plug-in Readme

System Requirements

This is the English Language version of the Photo Printer Plug-in and is intended to run on English versions of Windows 95 and Windows 98.

The "minimum" Hardware Configuration includes:

* Polaroid Digital Photo Printer
* 5 MB of Available Disk Space
* 16 MB of Memory
* Super VGA Monitor (1 MB of VRAM)
* Pointing Device (Mouse)

Installation Instructions

You install the Plug-in by running setup.exe that you will find in the folder "Plugins" located on the CD.

YOU MUST REBOOT YOUR SYSTEM IN ORDER FOR ALL DELIVERED COMPONENTS TO BE LOADED
PROPERLY BY WINDOWS.

Release Notes

If you elect to uninstall the plug-in, you must run a cache file clean up utility, named CleanUpIQADataFiles.exe, before running the uninstaller. Otherwise residual files will be left behind.

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Communication Error — Windows 95 ONLY
(for parallel port users only)

The parallel port driver requires updating when the message, "Communication Error Occurred" displays. This error can occur anytime after a successful installation of the Polaroid ColorShot Photo Printer software. ***Note****:* Not applicable to Windows 98 because the drivers are updated.

To correct this error:

1. Insert Polaroid ColorShot Photo Printer CD
2. Double click My Computer
3. Double click CD
4. Double-click UpdateLPTDriver.exe in the Utility folder

This updates the parallel port driver.

If printer errors continue, call Polaroid's Electronic Imaging Specialist at: 1-800-432-5355.

Installation of Web Browser Plug-in

Installation of the Polaroid ColorShot Photo Printer plug-in allows Web browsers (Netscape or Internet Explorer) to function as an imaging application. This allows you to print Web images directly from a Web site.

- Install Web browsers (Netscape or Internet Explorer) before installing the Polaroid ColorShot Photo Printer plug-in.
- Reboot the system after installing Polaroid ColorShot Photo Printer driver.

To install Polaroid ColorShot Photo Printer plug-in:

1. Insert Polaroid ColorShot Photo Printer CD
2. Double click My Computer
3. Double click CD
4. Double click setup.exe in the plug-in folder

Internet Explorer 4/Windows 95 environments require a current version of Microsoft's JavaScript Engine for successful execution of the Polaroid ColorShot Photo Printer plug-in. Refer to **JavaScript Engine for Internet Explorer (IE) version of Polaroid ColorShot Plug-in** paragraph for additional information.

JavaScript Engine for Internet Explorer (IE) version of Polaroid ColorShot Plug-in

The IE version of the plug-in requires the JavaScript engine (Microsoft Scripting Engine) for Windows 95. The engine may be downloaded from Microsoft's Web site [http://www.microsoft.com/msdownload/vbscript/scripting.asp] after selecting the applicable language version of the engine (i.e., US English x86 Alpha) and following the instructions.

Tips

Reinstall the Web plug-in if the Polaroid ColorShot Photo Printer Driver Software is uninstalled and reinstalled.

The latest version of the Web plug-in and other Polaroid ColorShot Photo Printer related software is available for downloading. Visit our Web site: www.polaroid.com.

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Polaroid Digital Products Service BULLETIN KB#981221155740GD

201 Burlington Rd. Bedford MA 01730

Polaroid ColorShot Vol. 1, No. 1

From: New Products Service Support Group
Date: December 21, 1998
Subject: **Netscape Browser Plug-In Released**

- **Category: Software Info Bulletin**
  The purpose of this bulletin is to alert Telephone Service providers regarding the release of a Netscape "Plug-in." The plug-in allows any ColorShot Digital Photo Printer to print images found on the World wide web.

- **Products Affected:**
  Polaroid ColorShot Parallel or USB digital photo printers.

- **Details:**

Features

Netscape Plug-in Version 1.1 has been released for the ColorShot Digital Photo Printers. The software can be downloaded from: www.ColorShot.com

The Plug-in works as an extension of the browser application. Note: The plug-in is an English only version and is scheduled to be localized and released on newer versions of the ColorShot software CD-ROM. The software has the following features:

- Works with Netscape version 4 or later.
- Capture and print images directly from the worldwide web.
- Captures jpeg, bmp, and tiff images, only.
- The software has controls and options for:
  - Image rotation
  - Fill frame
  - Best fit
  - IQA (including sharpening)
  - Print preview option
  - Number of copies to print

Installation

a) Download the plug-in to your local hard drive.
b) Run the downloaded "Plug-in.exe" file by double-clicking on the icon.
c) Files are unpacked in the Windows/Temp directory (the default location). The files in the Temp directory can be deleted after the installation is complete.
d) The files will automatically be loaded in the correct locations in Netscape.

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Using the Software

a) Go to a web location where a picture you want to print is located.
b) If it's a picture you can see on the page, place the cursor over the picture and right-click. If the image is a link, the picture appears directly in the ColorShot film frame after the link is selected and you can skip Step c).
c) Select the "View Image" choice in the drop-down menu. Note that the image name and its file type appear next to the View Image choice. Make sure the image is a: .jpg, .tif or .bmp file.
d) The image appears in a ColorShot window in a Spectra film-size frame. Controls for Number of images to print, a Print button and a Refresh button are under the frame.
e) Right click-on the image to access the rotation controls and "Preferences" from the drop down menu.
f) Use the Preferences choice to make adjustments for Best fit, Fill frame, IQA controls and a Print preview feature.
g) Note: The better the quality of the original image, the better the print quality. Low resolution images may appear pixilated when printed.

Contact: Gerald DiBello
Cc:mail: DIBELLO, GERALD Internet: dibellg@polaroid.com

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Service Bulletin

Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
Tel: 781-386-5651
Fax: 781-386-5611

No. PAF120399

Subject: T55 Film “wood grain” Defect
Author: Philip J. Cravotta
Date: December 3, 1999

Service Bulletin:

The purpose of this bulletin is to alert service providers to a deviation in the quality and/or performance of a specific film manufacturing cycle.

Product:

Type 55 P/N Film

Manufacturing Codes:

The following positive codes and expiration dates are affected:

G9xxxxxxxx	April 2000
H9xxxxxxxx	May 2000
J9xxxxxxxxx	June 2000
K9xxxxxxxx	July 2000

Issue:

A problem has occurred in the coating of the positive sheet resulting in a non-uniformity of the image that can be described as a “wood grain” pattern. The pattern appears in the instant print only, and is most prominent in the light gray areas. Pictures already taken and print-coated will not worsen with age. However, aging of unprocessed film will cause an increased "wood grain” effect when the film is used. The negative is not affected by the defect, and customers who refrigerate their film will slow down this age-related pattern.

This product has been shipped worldwide.

Customer Resolution:

Replace any film held by customers who have this problem.

Corrective Action:

Film return issues should be dealt with on an individual basis. The film is not being recalled from the dealers because most of the film has already been sold through to the end users. Also, customers who only use the negative may be indifferent to the quality of the instant print, and customers who refrigerate their film may not experience the problem.

In an effort to help Manufacturing have a better understanding of customer impact, please arrange to have representative samples sent to the following address:

Polaroid Corporation
1265 Main Street
Waltham, MA 02154-1799
USA
Attn: Brian Tanguay
Phone: 781-386-0097

Contact:

Please direct questions to

Phil Cravotta
Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
USA
Phone: 781-386-5651
E-mail: cravotp@polaroid.com

Distribution:

Polaroid Service Centers

Polaroid

Service Bulletin

No. IF010500

Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
Tel: 781-386-5651
Fax: 781-386-5611

Second Release

Subject: Dead Battery Issue
Author: Philip J. Cravotta
Date: December 15, 1999

Service Bulletin:

The purpose of this bulletin is to alert service providers to a deviation in the quality and/or performance of a specific film manufacturing cycle.

Product:

Type 600 and Type 779 Film

Manufacturing Codes:

Film with positive codes and expiration date listed below will be affected to a relatively small degree.

129xxxxxxxx **March 2001**

Issue:

A problem has occurred in a manufacturing run of batteries that will result in the customer experiencing a dead battery throughout the film pack. It is expected that the defect occurrences will be sporadic and will cause a slight increase in the number of customers with dead battery issues.

Customer Resolution:

Follow the standard troubleshooting procedure and replace any film held by customers who have this problem.

Corrective Action:

Film return issues should be dealt with on an individual basis. Replace the customers' defective film with film coupons or film, whichever is appropriate.

United States customers only – after replacing the customers' film, and until further notice, ask the customer to mail the defective film back to Polaroid for analysis. Inform the customer that Polaroid, in appreciation for their effort, will send them an additional film coupon for each pack they send in. Provide the customer with a SCOPUS reference number that should be included on the return. The film should be mailed to the following address:

Polaroid Corporation
920 Winter Street
Waltham, MA 02451

Attn: Anne O'Neil
Phone: 978-386-5507

Contact:

Please direct questions to

Phil Cravotta
Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
USA
Phone: 781-386-5651
E-mail: cravotp@polaroid.com

Distribution:

Polaroid Service Centers

Service Bulletin

Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
Tel: 781-386-5651
Fax: 781-386-5611

No. PAF101000

Subject: Pod Smear
Author: Philip J. Cravotta
Date: August 3, 2000

Service Bulletin:

The purpose of this bulletin is to alert service providers to a deviation in the quality and/or performance of a specific film manufacturing cycle.

Product:

Type 669 film

Manufacturing Codes:

The defect occurs randomly and may exist in any film lot, although not all film lots will have the problem.

Issue:

Polacolor 669 ER film is showing early signs of pod smear. Although the problem is exacerbated with age, it has recently been present in customer returns with as much as six months left on the expiration date. The customer will describe this defect on the phone as "streaked, pinkish streak, pink swirl or, part of the picture is covered in pink."

This problem can be reduced considerably if the film is stored in a refrigerator. This product has been shipped worldwide.

Customer Resolution:

When customers return film for pod smear, replace the film with fresh dated film that is less than three months old, having at least nine months left on the expiration date. On a temporary basis, do not use a film coupon as compensation for pod smear. We want to make sure that the customer's replacement film is fresh, in order to minimize the possibility of a recurrence of the same problem in the replacement film, which could be brought on by aging.

If you are unable to obtain replacement film with at least nine months left on the expiration date, you should notify David Kennedy at the Vale. David has agreed to have long-dated replacement film shipped directly to the customer from the Vale. Send David your request by email at kennedd@polaroid.com.

Corrective Action:

Manufacturing is working on both a short-term and a long-term solution to the pod smear problem, by making changes in the processing chemistry.

The Services Group is expected to manage the situation with film replacement in the meantime. Also, as a preventative step, the customer should be advised that storing the film at high temperatures would increase the likelihood of this problem. Refrigeration is the best storage condition, but at minimum the film should be stored in a cool, dry environment. The film should be allowed to reach room temperature before being used.

Contact:

Direct questions or unmanageable situations to:

Polaroid Corporation
Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730

Attention: Phil Cravotta
Phone: 781-386-5651
E-mail: cravotp@polaroid.com

Distribution:

Polaroid Service Centers

Service Bulletin

Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
Tel: 781-386-5651
Fax: 781-386-5611

No. PAF091900

Subject: TPX Film Speed Deviation
Author: Philip J. Cravotta
Date: September 21, 2000

Service Bulletin:

The purpose of this bulletin is to alert service providers to a deviation in the performance of a specific film manufacturing cycle.

Product:

Type TPX 8x10 Radiographic Transparency Film

Manufacturing Codes:

The following positive codes and expiration dates are affected:

J0xx173	September 2001
J0xx237	September 2001

Issue:

An increase in sensitivity by a factor of two has occurred in TPX film. All other characteristics of this film are within specifications and the customer will experience no deficiencies in image quality, once an adjustment has been made for the proper exposure.

This product has been shipped worldwide.

Customer Resolution:

A notice has been packaged with the film that explains the increase in sensitivity and the corrective course of action to take. The notice reads as follows:

Attention

This material is more sensitive than the product you are currently using.

Please reduce your exposure level by 50% to achieve the same results that you are accustomed to.

Thank you

This notice should be sufficient explanation in most cases. If further explanation is needed, however, you should explain that a 50% reduction in the level of exposure could be accomplished by reducing the intensity of the radiation by 50% or by reducing the duration of the radiation by 50%.

Image quality is unaffected so film replacement is not expected.

Corrective Action:

Normal film sensitivity is expected for TPX film manufactured in the future.

Contact:

Please direct questions to:

Phil Cravotta
Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
USA
Phone: 781-386-5651
E-mail: cravotp@polaroid.com

Distribution:

Polaroid Service Centers

Polaroid Digital Products

Service BULLETIN KB001026093504GD

201 Burlington Rd. Bedford MA 01730

PolaColor Insight Vol. 3, No. 11

From: New Products Service Support Group
Date: October 26, 2000
Subject: **Windows 2000 SCSI error message seen when starting Insight**
Author: Gerald DiBello

Category: Software Info Bulletin

The purpose of this bulletin is to alert Telephone Support and Repair organizations regarding Windows 2000 and PolaColor Insight support issues.

Products affected:

PolaColor Insight version 4.5, 4.5.1 and later

Details:

When starting PolaColor Insight the user sees this error message: **Specified module could not be found and SCSI support found but no SCSI boards available.** In all cases, the SCSI card was correctly installed because it is seen in the device manager.

Resolution:

1. Checking to see if a SCSI card is recognized by Windows 2000
   a) Right click on the My Computer icon
   b) Choose Properties
   c) Select the Hardware Tab
   d) Click the Device Manager button
   e) Check to see if a SCSI card is listed under the SCSI Controllers category
   f) If a SCSI card is shown, go the **Step 2**. If not, it is possible that the SCSI card is not seated correctly in its socket on the PC's motherboard.

2. Update the ASPI layer. If it's an Adaptec SCSI card go to http://www.adaptec.com/support/files/upgrades.html and download the file: **ASPI32.exe**

3. Run ASPI32.exe to update or newly install an ASPI layer. The software installer requires a re-boot of the PC. **Note:** Just like the older Windows NT 4, an ASPI layer is not included with the operating system and must be manually installed by the user. The ASPI layer must be present for a SCSI card to work with the operating system.

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

4. Start PolaColor Insight and it should now run without error messages.

5. Note that there are Windows 2000 specific miniport drivers available for many Adaptec SCSI cards. Users should install a new driver, if one is available. Go to this location to find them: http://www.adaptec.com/support/overview/scsiha.html find the card number, click on and you will go to a page where you can select and download the Windows 2000 specific driver for the card. Readme instructions with the driver tell you how to install it.

Polaroid's Electronic Imaging Systems service bulletins are subject to change as necessary. The information above was believed to be correct at the time of printing. If you have any questions regarding this document, please refer to the information sources outlined above.

Software Information Bulletin

June 5, 2000

Worldwide Customer Support Services
201 Burlington Road
Bedford, MA 01730
Tel: 781-386-5471
Fax: 781-386-5611

RasterPlus Windows Edition Version 3.0.3 for Polaroid

Software Information Bulletin
The purpose of this bulletin is to provide Telephone Support and Repair organizations with information on the features of the new RasterPlus Windows Edition v3.0.

Products Affected
ProPalette 7000, ProPalette 8000 Series, HR6000, CI5000, CI3000

Details
RasterPlus Windows Edition v3.0 has been released as of the date of this bulletin. The new software has the following feature changes:

New Feature Summary
Windows 2000 support
New User Interface
New PostScript Level 3 / PDF support

Software Availability
July 14, 2000

PID Numbers

115445	Software CFR – All ProPalettes
115533	Software for CI and HR
115446	Software Upgrade – All Palettes

Note: A previous version of RasterPlus *must* already be installed on the computer for the upgrade to install.

New Feature Listing

Windows 2000 Support RasterPlus. Windows Edition v3.0 fully supports Windows 2000 Professional and Windows 2000 Server with all the files needed for a seamless installation.
Notice: Previous versions of RasterPlus (RasterPlus95 v2.0 or earlier) do not support Windows 2000 and may cause problems in the printing subsystem of the operating system.

***NEW!* Visual Print Workflow with Archive.** The power of RasterPlus has never been easier to use. With the new three-step visual print workflow, incoming files are placed in a **Hold** area where they can be previewed and released. Once approved, files go to a **Print** engine that quickly renders files to the device resolution. After printing, all files are collected in an **Archive** for future reprints. Each step is managed independently, so you can now *preview and print files at the same time!*
Comparison: Application printing to the queue for previewing in v2.0 required the customer to first configure a RasterPlus Enabled, Active, or Disabled queue. New in v3.0 is the ability to Print to Hold area right from the application.

***ALL NEW* PostScript 3.** RasterPlus raises performance printing to a new level: PostScript 3. With the new world class PostScript 3 engine, RasterPlus delivers rich new graphics capabilities that fulfill the creative expression requirements of imaging professionals. Print quality is dramatically improved with smooth shading technology that renders gradient blends at the targeted device resolution. Better yet, it processes files *up to 3 times faster than before!*

***NEW!* Native PDF Processing.** RasterPlus v3.0 adds native PDF processing to its extensive file format list. Now your clients can preview in Adobe Acrobat and send you the same file for a consistent print workflow. Simply drop the PDF file to the queue and it will automatically print.

***NEW!* Integrated Font Manager.** RasterPlus v3.0 introduces a manager for adding PostScript Type 1 fonts needed in processing EPS or Postscript files that do not include fonts. Also, when directly File-Printing to RasterPlus, all the necessary fonts are automatically included before printing. Either way, you can finally say goodbye to font substitution errors.

***NEW!* JPEG-EXIF and Multipage Bitmap Support.** Most modern digital cameras export their images as multi-page bitmap files (usually EXIF). Simply drag-and-drop the camera files into RasterPlus v3.0 and instantly print.

***NEW!* Tab View Print Queues.** Because RasterPlus Windows Edition is a true multi-task print application, several print queues can be used at once. Each print queue can be assigned different properties and even different printers, *all operating at the same time.* To easily manage each print queue, an intuitive **Tab View** is used so you can quickly switch from one to another.

***NEW!* Automatic Save State.** Once you tailor RasterPlus to your liking, it automatically saves before you quit. The next time you start RasterPlus, all program settings, including print queues and window sizes, are restored to the way you left them.

ALL NEW! **Web-Ready Print Logs.** Keeping track of what you print is now easier than ever with the new Web-ready (HTML) print log in RasterPlus. Each print is recorded with the time and owner name so you can easily account for your print jobs. Better yet, the print log can be accessed and printed within RasterPlus or *from any Web browser on the network!*

NEW! **Automatic Internet Updates.** RasterPlus now features an Internet update client that automatically connects to the Graphx Web server and lets you download new RasterPlus components. Keeping your RasterPlus current is now just a click away!

Service Resource

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